NEW JERSEY PROFILE

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Thomas H. Kean
Governor

Economic Policy Council
and Office of Economic Policy

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STATE OF NEW JERSEY
OFFICE OF THE GOVERNOR
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I am pleased to present to all our citizens this third edition of the New Jersey Profile. The Profile is a source of broad knowledge and information about New Jersey's prominent place among the states of the union. The Garden State's successes in its recent past is presented in a clear way in tables and graphs accompanied by concise texts. The picture of New Jersey that emerges from this book is a state on the move, growing faster than the national economy, vibrant, diversified and in constant adjustment to the new national and international market conditions. It depicts a state that has profoundly changed from what it was just a decade ago.

I believe that this new edition of the Profile will be invaluable to all those interested in learning about New Jersey. I am sure those interested will be proud of the state in which they choose to live and work. I commend the Economic Policy Council and Office of Economic Policy for preparing this very informative publication.

Sincerely,

Tom Kean

Thomas H. Kean
Governor

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Many state employees, too numerous to cite individually, from the departments of Commerce, Agriculture, Education, Health, Labor and State provided data and answered our questions relating to the activities of their departments. We are grateful to all these people for their cooperation in the assembly of this Third Edition of the *New Jersey Profile*.

PREFACE

This is the third edition of the *New Jersey Profile*. Like its predecessors, it provides a comprehensive analysis of the status and recent trends in New Jersey's economy. All the data and sources in the *Profile* have been carefully updated, and completely new narratives have been written for each chapter. This edition features an expanded coverage of that role of tourism and cultural activities in the State's economy. Where relevant, each chapter also provides a comparison between the economic changes that have occurred in New Jersey and those in our neighboring states and the nation as a whole.

Although all the material is new and current, the purpose of this *Profile* remains unchanged—namely, to provide in a single source, complete and accessible information on the State's economy to all concerned New Jerseyans. This is in keeping with the Public Law charge to the Economic Policy Council and Office and our strong belief in the importance of active and informed citizen participation in public affairs.

All data sources are identified so that interested readers can pursue any topic in more detail. We believe this *Profile* will continue to serve as a useful and convenient reference on all aspects of New Jersey's economy.

Joseph J. Seneca
Chairman
Economic Policy
Council

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OVERVIEW

New Jersey offers its residents and visitors a wide variety of opportunities. Some visitors may see only the industrial corridor between New York City and Philadelphia (a vital section to be sure), but the Garden State has many other valuable features.

New Jersey has many historical sites, including the famous site of George Washington's Delaware River Crossing near the State's capital, Trenton. Many other famous sites may be found in New Jersey. It is one of the original 13 states and has numerous charming cities and towns dating back to the Revolution era.

Forty percent of the State's total land area is forest-covered and the enormous Pine Barrens rivals any of the nation's wilderness spots. Scenic areas exist in each of New Jersey's 21 counties. The State's shoreline has some of the best beaches in the country, many areas with boardwalks and amusements, others set aside as wilderness areas.

New Jersey's proximity to two of the nation's four largest cities, its location in the center of the northeastern corridor, its magnificent highway systems and extensive rail and port facilities, make it a superior location for national and international corporations.

These are some of the features which make up New Jersey's total resources. This Profile describes many of the State's attributes—concentrating on its economy, its people and its industry, but also covering other assets including the Garden State's natural resources and cultural attractions.

POPULATION

The 7.6 million population and the small size of New Jersey make it the most densely populated state in the nation. The State's population grew at a rapid rate of 1.7 percent per annum during the 1960s, exceeding the national average of 1.2 percent. A reversal occurred in the 1970s as the annual population growth fell to 0.3 percent, compared to 1.08 percent in the United States. However, there has been a slight acceleration of population growth in the State in recent years (0.8% in 1986).

Cities in the State generally declined in population as the residents of suburban and exurban areas increased. A high percentage (89%) of the State's people continue to reside in areas classified by the Census Bureau as "urban."

EMPLOYMENT

Nonagricultural employment in New Jersey has, for some time, grown more rapidly than that of other states in the region. Over the past several

decades an important transformation has taken place in the makeup of sectoral employment shares in the State. Nearly half of the State's workers were employed by the goods-producing (Manufacturing, Construction and Mining) sector in 1960. By 1986, the goods-producing sector had fallen to 24 percent of all employment, a share closely approximating the national figure. Offsetting the drop was a corresponding rise to 60 percent in private service sector employment.

For most of the 1970s, the unemployment rate in New Jersey had been higher than in the nation as a whole. Since 1981, however, the State's unemployment rate has been less than the rate in the United States. As is the case nationwide, minorities and teenagers in the State have been faced with extremely high unemployment rates.

INCOME

Since 1970, per capita personal income almost quadrupled, reaching $18,626 in 1986, which is the second highest in the United States and 27 percent above the national average of $14,641. The average yearly increase in per capita personal income from 1980 to 1986 was 8.25 percent, significantly higher than the 6.7 percent for the United States and greater than the growth rates for neighboring states.

Within the State, per capita income in 1984 ranged from a high of $19,892 in Bergen County to a low of $11,221 in Cumberland County, and all southern counties had lower per capita income levels than the State average of $16,268.

An increasing portion of wage and salary income, which is a major part of personal income, is being generated by service industries, while manufacturing accounts for a diminishing, but still the largest part, of labor income. Between 1970 and 1986, the share of service industries in the State's total wage and salary income rose from 13.1 percent to 21.2 percent, in contrast to a decline in manufacturing's share from 35.6 percent to 23.5 percent.

AGRICULTURE AND NATURAL RESOURCES

New Jersey has 8,200 farms covering 900,000 acres of land. The State has several crops which rank high among states. Included are blueberries, spinach, summer potatoes, cranberries and tomatoes. Farm receipts in 1985 totaled $591 million, including $144 million from vegetables, and $88 million from fruits and berries.

The commercial fishing industry had a total catch of 108 million pounds, valued at $61 million in 1985.

Forests occupy about 40 percent of the State's total land area. Part of

it is commercial timberland which produced 3,127 million board feet of saw timber in 1977.

About $156 million in minerals was extracted in the State in 1984. The major extractions were crushed stone, zinc, sand and gravel.

CONSTRUCTION AND MANUFACTURING

In 1986, New Jersey's construction and manufacturing sectors employed approximately 850,000 workers, or about one-quarter of all nonagricultural employment in the State.

There were some 36,800 construction establishments in the State with total receipts exceeding $10 billion in 1982. From 1970 to 1980, the State's housing stock increased 16.1 percent, from 2.4 million to nearly 2.8 million units. Ocean County had the largest percentage gain in housing (57.3%), while Essex County has the lowest gain of only 1.8 percent. Similar patterns have prevailed in housing permits during the 1980s.

New Jersey's manufacturing sector employed 692,800 persons in 1986. The State's largest manufacturing industry was Chemicals & Allied Products which, with 26 percent of the State's manufacturing value added and 12 percent of manufacturing employment, was much more strongly represented in New Jersey than in the nation as a whole. Other industries in which New Jersey specializes are Printing & Publishing, Stone, Clay & Glass Products and Apparel.

In 1984, New Jersey exported over $8 billion worth of manufactured goods. This figure amounted to 10.3 percent of the State's total manufacturing shipment. Major exports in the State were Chemicals & Allied Products, Electrical & Nonelectrical Machinery and Food industries.

TRANSPORTATION, COMMUNICATION AND PUBLIC UTILITIES

As the nation's most urbanized state, transportation, communication and public utilities are essential to New Jersey's residents, business firms and other institutions. This sector employed 229,800 persons in 1986, up 18.1 percent from 194,500 in 1980.

New Jersey has a well-developed transportation system—highways, railroads, airports and seaports. The State's highways are much more heavily traveled than elsewhere. Average daily travel per mile of highway in New Jersey was 4,294 vehicle miles in 1985, over 3.4 times the national average. Despite the heavy traffic, the State's traffic safety record continues to be among the best in the nation. Since 1976, New Jersey drivers have continued to drive fewer miles each year and logged 9,166 miles per licensed driver in 1985. The State's railroad track mileage per square mile of land area far surpasses that of the nation.

New Jersey's telecommunications industry is especially noteworthy.

For many years the Garden State has led the United States in advances in the communications field. Today, the State's telecommunications firms remain in the forefront as the industry moves into exciting new technology.

New Jersey's energy output grew 4.0 percent per annum from 1975 to 1985, compared to 2.6 percent in the nation. In power generation, the State uses far less coal than the United States and relies much more on nuclear plants (51% of total electric output in N.J. vs. 16% in the U.S.). Between 1972 and 1982, customers for electricity increased faster (1.29% per annum) in the State than gas customers (0.46%).

TRADE, SERVICES AND TOURISM

In 1986, 832,800 persons were employed in wholesale and retail trade. This sector's employment increased by 26.4 percent during the 1970s, and from 1980 to 1986 another 22.4 percent was added.

Retail sales in 1986 totaled $50.8 billion in the State. Wholesale trade has grown faster in New Jersey than in New England and the neighboring states. Over 260,000 persons were employed in wholesale trade in 1985 and receipts in the sector totaled $89.4 billion.

Services have grown faster in New Jersey than in the nation. The State has increased its national share of services employment from 3.48 percent in 1980 to 3.61 percent in 1985.

New Jersey's shores and beaches are among the best in the nation and together with other attractions make the State a premier tourist spot. In recent years, expenditures on travel and tourism in New Jersey and employment in the State's travel-related industries grew much faster than the overall economy, contributing significantly to the booming State economy.

FINANCE, INSURANCE AND REAL ESTATE

The finance, insurance and real estate industries employed 208,900 persons in 1986, an increase of 4.75 percent per annum from 1980.

Commercial banks in New Jersey held only 1.76 percent of the nation's total commercial bank assets in 1982, but this figure has increased to 2.38 percent in 1986. Deposits in commercial banks totaled almost $60 billion in 1986; total assets exceeded $70 billion. Total assets in all financial institutions were $137 billion in 1986.

Insurance companies based in New Jersey increased from 60 in 1981 to 87 in 1985; nearly one thousand companies sold policies in the State in 1985. More than half were fire and casualty insurance companies and more than one-third were life insurance companies.

EDUCATION AND CULTURE

In 1980, high school graduates made up 67.8 percent of the population 25 years and over, a rate higher than the United States' 66.3 percent. In

the same population group, 18.6 percent had completed four years or more of college compared to the nation's 16.3 percent.

While New Jersey had a larger percentage (79.7% in Fall 1985) of students in public institutions of higher education than did the United States (77.4%), the State had a smaller percentage (84.2% in 1980) of pupils in public schools than the national average (89.1%). Pupil/teacher ratios in public elementary schools fell in the State from 21.7 in 1970 to 15.0 in 1985.

Full- and part-time enrollments in New Jersey colleges and universities dropped by nearly 10,000 from 1978 to 1985. A total of 43,000 degrees were awarded in FY 1985-86, including 8,769 advanced degrees and 10,779 associate and sub-associate degrees.

New Jersey has numerous cultural attractions and is home for more than 47,000 professional artists. The State ranks third highest among all states in artists per capita. There are over 1,000 arts organizations with expenditures exceeding $100 million in 1985.

State funding for the arts increased from $3 million in FY 1982 to $20 million in FY 1988, and an additional $40 million for capital improvements to cultural centers has been approved by voters. In addition, the State's private sector has been an important source of support for the arts.

GOVERNMENT

State and local government employment in New Jersey grew from 268,000 in 1970 to 361,000 in 1984. Per 1,000 population, this is slightly higher than the all-state average, but significantly lower than that for New York State. New Jersey's state and local governments spent less per capita than the United States' average on health and hospitals; approximately the same on highways, public welfare and financial administration; but more for education, police and fire protection and other functions.

Per capita state and local taxes were higher in New Jersey than the all-state average, but as a percentage of personal income, the State's taxes were no higher than the national average.

New Jerseyans paid more federal taxes per capita than the national average. Moreover, with higher-than-average incomes, residents of the State paid a higher percentage of personal income in federal taxes.

1

POPULATION TRENDS AND CHARACTERISTICS

I

POPULATION TRENDS AND CHARACTERISTICS

1. POPULATION DENSITY

New Jersey is the most densely populated state in the nation with more than 1,000 persons per square mile. Over 7.6 million people reside within the Garden State's nearly 7,500 square miles of land. New Jersey's population density far exceeds figures for the United States as well as the other two Mid-Atlantic states, New York and Pennsylvania (Table 1.1).

Table 1.1
Density of Population by Region and State (persons/sq. mile)

	1960	1970	1980	1985
United States	50.6	57.4	64.0	67.4
New England	166.8	188.1	196.0	201.0
New York	350.6	381.3	370.6	374.9
New Jersey	805.5	953.1	986.2	1,012.6
Pennsylvania	251.4	262.3	264.3	264.1
South Atlantic	97.1	114.9	138.4	150.6

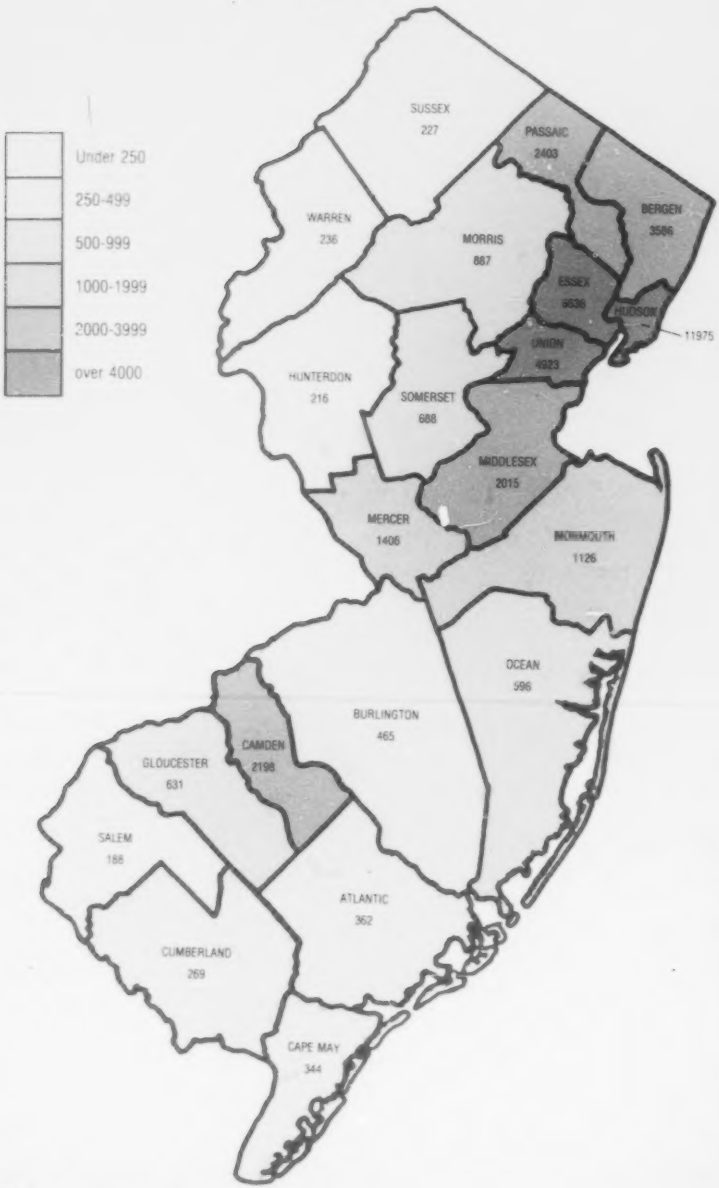
Source: (48)

While population density (number of persons per square mile) for New Jersey, as a whole, is high, there are substantial differences among individual counties. Figure 1.1 shows that the densities for Salem and three northwestern counties (Hunterdon, Sussex, Warren) are well under a quarter of the state average, while three northeastern counties (Hudson, Essex and Union) are more than four times as densely populated as the state as a whole. In particular, Hudson County, in spite of a slight decline since 1980, still has almost 12,000 persons per square mile.

2. POPULATION GROWTH

In the early 1960s, New Jersey's population grew at an average annual rate of more than two percent, but this rate declined considerably since then. During the 1970s, particularly between 1972 and 1977, population was practically stagnant. Population growth resumed in the 1980s, however; the average annual rate of growth betwen 1980 and 1985 was above 0.5 percent. In 1986, according to provisional figures, the population of the State was almost 0.8 percent over that of 1985 (Table 1.2).

FIGURE 1.1
POPULATION DENSITY BY COUNTIES, 1980
(persons per square mile)



Source: (9).

Table 1.2
New Jersey Resident Population (1960–1986)

Year	Resident Population (000)	Annual Percent Change
1960*	6,066	1.8
1961	6,222	2.6
1962	6,370	2.4
1963	6,503	2.1
1964	6,614	1.7
1965	6,720	1.6
1966	6,821	1.5
1967	6,917	1.4
1968	7,012	1.4
1969	7,103	1.3
1970*	7,171	1.0
1971	7,281	1.5
1972	7,335	0.7
1973	7,333	0.0
1974	7,332	0.0
1975	7,338	0.1
1976	7,340	0.0
1977	7,337	0.0
1978	7,351	0.2
1979	7,367	0.2
1980*	7,365	0.0
1981	7,406	0.6
1982	7,428	0.3
1983	7,464	0.5
1984	7,511	0.6
1985	7,561	0.7
1986	7,620(p)	0.8

*Population figures for 1960, 1970 and 1980 are April 1 census counts. Estimates for intercensal years are as of July 1, and those estimates from 1981 to 1986 are subject to revision. (p)—provisional
Source: (21)

In comparison to the U.S., New Jersey's population growth during the 1960s averaged 0.43 percentage point above the national rate of 1.26 percent, while in the 1970s it averaged 0.82 percentage point below the national average annual rate of 1.09 percent. Between 1980 and 1986, according to provisional figures, the average growth rate in New Jersey was 0.52 percent below its national counterpart. However, the state has been closing this growth gap in recent years. In comparison to Pennsylvania, New York and even New England, in the 1980–85 period, New Jersey's growth rate was higher (Table 1.3).

Table 1.3
Total Population and Average Annual Rate of Growth by Region 1960, 1970, 1980 and 1985 (in thousands)

					Average Annual Rate of Change (%)		
	1960*	1970*	1980*	1985**	1960–70	1970–80	1980–85
United States	179,323	203,302	226,546	238,740	1.26	1.09	1.05
New England	10,509	11,848	12,348	12,660	1.21	0.41	0.50
New York	16,782	18,241	17,558	17,783	0.84	−0.38	0.25
New Jersey	6,067	7,171	7,365	7,562	1.69	0.27	0.53
Pennsylvania	11,319	11,801	11,864	11,853	0.42	0.05	−0.02
South Atlantic	25,972	30,678	36,959	40,227	1.68	1.88	1.71

*Estimates as of April 1.
**Estimates as of July 1.
Sources: (46) and (48).

3. INTRASTATE GROWTH DIFFERENCES

As total population for New Jersey increased more than three percent between 1980 and 1986, individual counties recorded percentage changes which varied significantly from the state average. The largest increase in population took place in Ocean County where the growth rate was almost 14 percent, followed by Cape May with nearly 12 percent and Hunterdon with over 10 percent. On the other hand, Bergen, Essex and Hudson all experienced losses in population; the largest loss over approximately six years was observed in Bergen (by one percent) (Table 1.4).

One factor contributing to uneven population growth has been the tendency toward migration out of the cities which partially accounts for the increased population in communities like Edison Township, which experienced nearly 17 percent increase between 1980 and 1986, Brick Township nearly 14 percent, Gloucester Township nearly 12 percent, and Dover Township and Middletown Township nearly 11 percent. Many small suburban communities have experienced much faster growth rates (Table 1.5).

Despite the outmigration from the cities, the proportion of New Jerseyans residing in urban and rural areas has remained stable for two decades.

There has been no change subsequent to a three point increase in the percentage of urban residents between 1950 and 1960. New Jersey continues to have the highest percentage in the nation of residents in urban areas. With 89 percent, it exceeds the United States by 15 percentage points; New York by 4.4 points and Pennsylvania by nearly 20 points (Figure 1.2).

Table 1.4
Resident Population for New Jersey Counties
1980, 1986 and 1990 Projection

County	1980	1986**	Percent Change	1990 Projection EDM***
Atlantic	194,119	206,300	6.28	224,800
Bergen	845,385	836,900	−1.00	850,300
Burlington	362,542	382,500	5.49	409,800
Camden	471,650	492,900	4.50	521,300
Cape May	82,266	92,200	12.05	98,800
Cumberland	132,866	136,500	2.70	140,300
Essex	851,304	843,900	−0.87	816,200
Gloucester	199,917	210,700	5.40	220,100
Hudson	556,972	551,800	−0.93	561,800
Hunterdon	87,361	96,500	10.44	98,000
Mercer	307,863	322,500	4.74	338,600
Middlesex	595,893	636,200	6.77	653,600
Monmouth	503,173	542,400	7.81	547,200
Morris	407,630	418,500	2.67	447,100
Ocean	346,038	393,600	13.75	413,300
Passaic	447,585	461,500	3.12	465,000
Salem	64,676	65,500	1.21	67,500
Somerset	203,129	215,200	5.94	227,700
Sussex	116,119	122,800	5.76	131,300
Union	504,094	504,700	0.11	520,600
Warren	84,429	86,600	2.57	88,800
State Total	7,365,011	7,620,000	3.46	7,842,100

*Census data as of April 1
**Survey estimate as of July 1
***Economic Demographic Model
Source: (25)

4. COMPONENTS OF POPULATION CHANGE

The rate at which a state's population changes is the net sum of three ingredients: the birth rate, death rate and net migration rate for the state.

Table 1.5
Resident Population for Selected New Jersey Municipalities

	1980	1986*	Percent Change
Atlantic City	40,199	36,219	−9.90
Bayonne	65,047	62,695	−3.62
Bloomfield	47,792	47,812	0.04
Brick Twp.	53,629	60,902	13.56
Camden	84,910	83,265	−1.94
Cherry Hill Twp.	68,785	72,544	5.46
Clifton	74,388	76,519	2.86
Dover Twp. (Ocean Co.)	64,455	71,434	10.83
East Orange	77,878	77,583	−0.38
Edison Twp.	70,193	81,934	16.85
Elizabeth	106,201	106,656	0.43
Gloucester Twp. (Camden Co.)	45,156	50,359	11.52
Hamilton Twp. (Mercer Co.)	82,801	87,375	5.52
Hoboken	42,460	41,363	−2.58
Irvington	61,493	62,470	1.59
Jersey City	223,532	218,576	−2.22
Middletown Twp.	62,574	69,290	10.73
New Brunswick	41,442	39,858	−3.82
Newark	329,248	316,345	−3.92
North Bergen Twp.	47,019	47,363	0.73
Old Bridge Twp.	51,515	55,466	7.67
Parsippany–Troy Hills	49,868	49,247	−1.25
Passaic	52,463	53,957	2.85
Paterson	137,970	139,453	1.07
Piscataway Twp.	42,223	43,825	3.79
Plainfield	45,555	46,095	1.19
Trenton	92,124	91,746	−0.41
Union City (Hudson Co.)	55,593	55,823	0.41
Union Twp.	50,184	50,875	1.38
Vineland	53,753	53,981	0.42
Wayne Twp.	46,474	49,549	6.62
Woodbridge Twp.	90,074	93,106	3.37

*Provisional estimates.
Source: (21)

New Jersey's overall population growth rate differs from national figures as a result of differences in these basic components.

Birth Rate

In 1985, a total of 105,329 babies were born in New Jersey, of which 77 percent were white and 18 percent black (Table 1.6). Other races accounted for three percent, with the remaining two percent unknown.

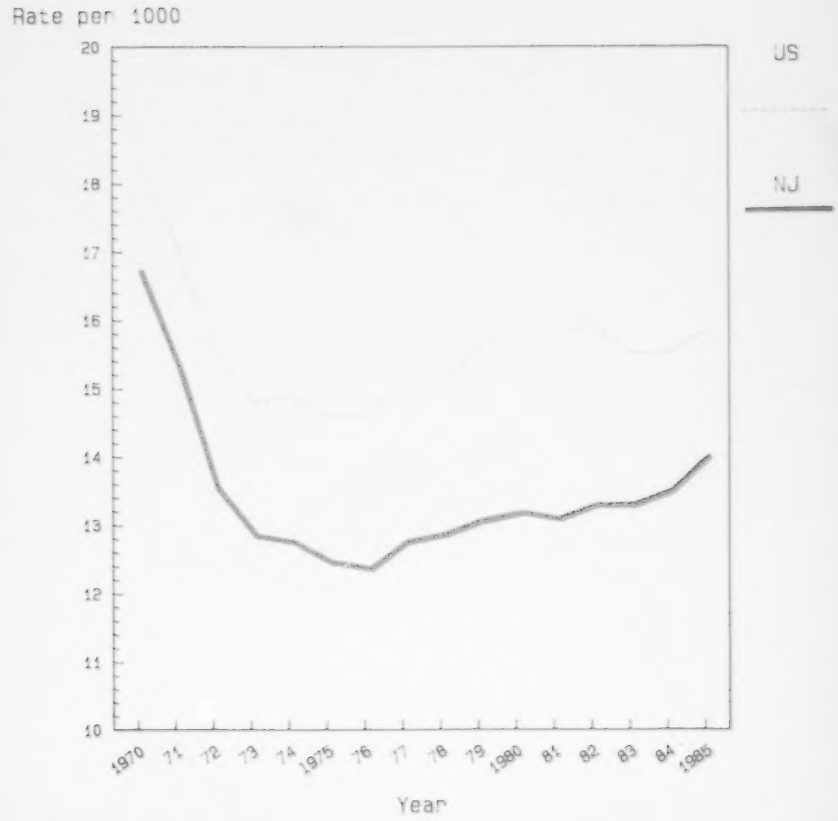
The birth rate (the number of births per 1,000 population) has decreased significantly since 1960 for both the United States and New Jersey (Figure 1.3). Whereas, the birth rate for New Jersey in 1960 was about 22 per 1,000

FIGURE 1.2
PERCENTAGE OF POPULATION IN URBAN AREAS
By States & Regions, 1980

Source: (48).

population; in 1980 the birth rate was slightly more than 13 per 1,000 population. While the New Jersey rate has always been below the United States rate, the gap narrowed recently. In spite of an increase in 1985, the United States rate remained under 16, the New Jersey rate rose to almost 14 births per 1,000 population.

FIGURE 1.3
BIRTH RATES
New Jersey and United States
1970–1985



Sources: (17) and (48)

Table 1.6
New Jersey Total Births by Race, 1985

	Births	Percent
New Jersey	105,329	100%
White	80,847	77
Black	19,439	18
Other	2,697	3
Unknown	2,346	2

Source: (16)

As in the past, birth rates within the State varied considerably among different counties. In 1985, Camden County registered the highest birth rate with 16.4 births per 1,000 people and Bergen County recorded the lowest with 11.2.

Table 1.7
Birth Rates, Mortality Rates by Counties, 1985

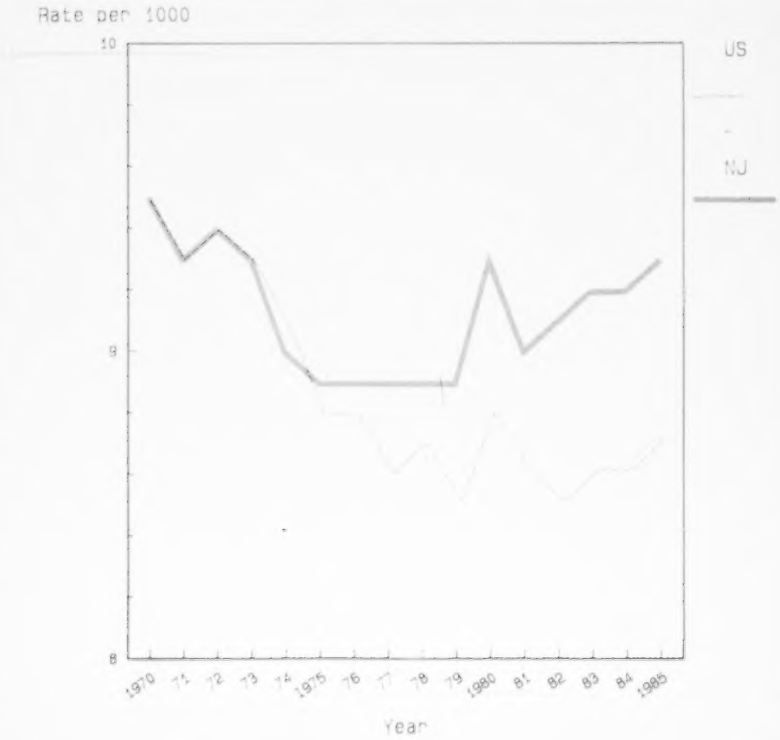
	Birth Rates (per 1,000 pop.)	Mortality Rates (per 1,000 pop.)
Atlantic	15.5	11.4
Bergen	11.2	9.3
Burlington	13.4	7.3
Camden	16.4	9.2
Cape May	14.2	13.8
Cumberland	15.7	10.2
Essex	14.9	9.9
Gloucester	15.7	8.1
Hudson	14.9	10.3
Hunterdon	13.7	7.2
Mercer	13.6	9.4
Middlesex	13.7	8.0
Monmouth	13.4	9.6
Morris	12.6	7.1
Ocean	13.4	13.5
Passaic	15.4	9.4
Salem	14.0	9.6
Somerset	12.8	7.2
Sussex	16.0	7.0
Union	13.2	9.7
Warren	13.7	9.1
TOTAL	13.9	9.3

Source: (16)

Mortality Rate

New Jersey's mortality rate (the number of deaths per 1,000 population) was higher than the national average during the 1950s and early 1960s, but virtually identical from the late 1960s to 1975. Since 1975 the mortality rates for New Jersey have again exceeded those of the United States. In 1985 New Jersey's mortality rate was 9.3 deaths per 1,000 population, reaching again the previous peak level observed in 1980 (Table 1.7 and Figure 1.4).

FIGURE 1.4
DEATH RATES
US and New Jersey
1970–1985

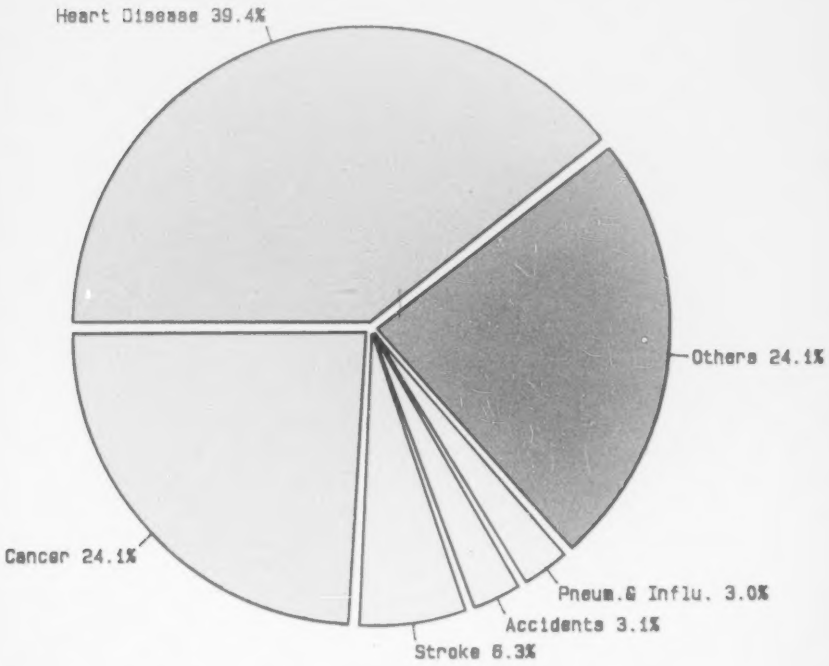


Source: (48)

Within the State, big differentials do not reflect different living conditions, but rather the age distribution. For example, Cape May and Ocean County have larger shares of older people and, consequently, exhibit much higher mortality rates than elsewhere.

A total of 70,655 New Jersey residents died in 1985. The leading cause of death was heart disease which was responsible for more than 39 percent of the deaths. Among the other leading causes of death were cancer (24%), stroke (6%), accidents, pneumonia and influenza (Figure 1.5).

FIGURE 1.5
LEADING CAUSES OF DEATH OF NEW JERSEY RESIDENTS
1985



Source: (16)

Infant Mortality Rate

The numbers of deaths of persons under one year of age per 1,000 live births continually declined from 20 in 1970 to 12.3 in 1978. In 1984, it was 10.8 and in 1985 only 10.6, corresponding with the rates for the whole nation. (Table 1.8). Within the state, the highest county rates for 1985 appeared in Salem (19.7) and Essex (16.1); the lowest in Somerset (4.5) and Sussex (5.7).

Table 1.8
New Jersey's Infant Mortality Rate

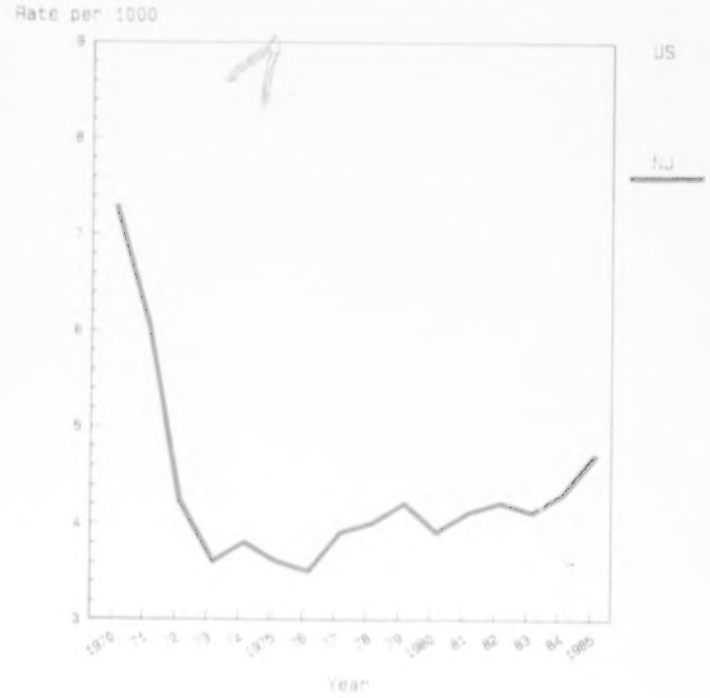
Year	Number of Infant Deaths	Infant Mortality Rates (per 1,000 live births)
1970	2,406	20.0
1971	2,095	18.8
1972	1,809	18.3
1973	1,644	17.5
1974	1,582	16.8
1975	1,434	15.7
1976	1,366	15.1
1977	1,355	14.4
1978	1,145	12.3
1979	1,223	12.8
1980	1,201	12.5
1981	1,016	10.6
1982	1,153	11.7
1983	1,115	11.3
1984	1,090	10.8
1985	1,113	10.6

Source: (17)

Net Natural Increase

The net natural rate of increase of population, which is the net result of birth and death rates, has declined considerably since 1970. As in the United States, the net natural rate of increase in New Jersey has declined due to the drop in birth rates, although it picked up again in 1984 and 1985 because of higher birth rates after 1981. As Figure 1.6 depicts, over the 1970–1985 period, New Jersey's rates of net natural increase have been lower than the national rates. Within the State, between 1980 and 1986, the highest rate of net natural increase appear in Sussex (5.37%), Burlington and Gloucester (4.6%), the lowest in Ocean (0%) and Bergen (0.8%). Only Cape May shows a decrease, implying that the number of deaths exceeded that of births.

FIGURE 1.6
NET NATURAL INCREASE
United States and New Jersey,
1970–1985

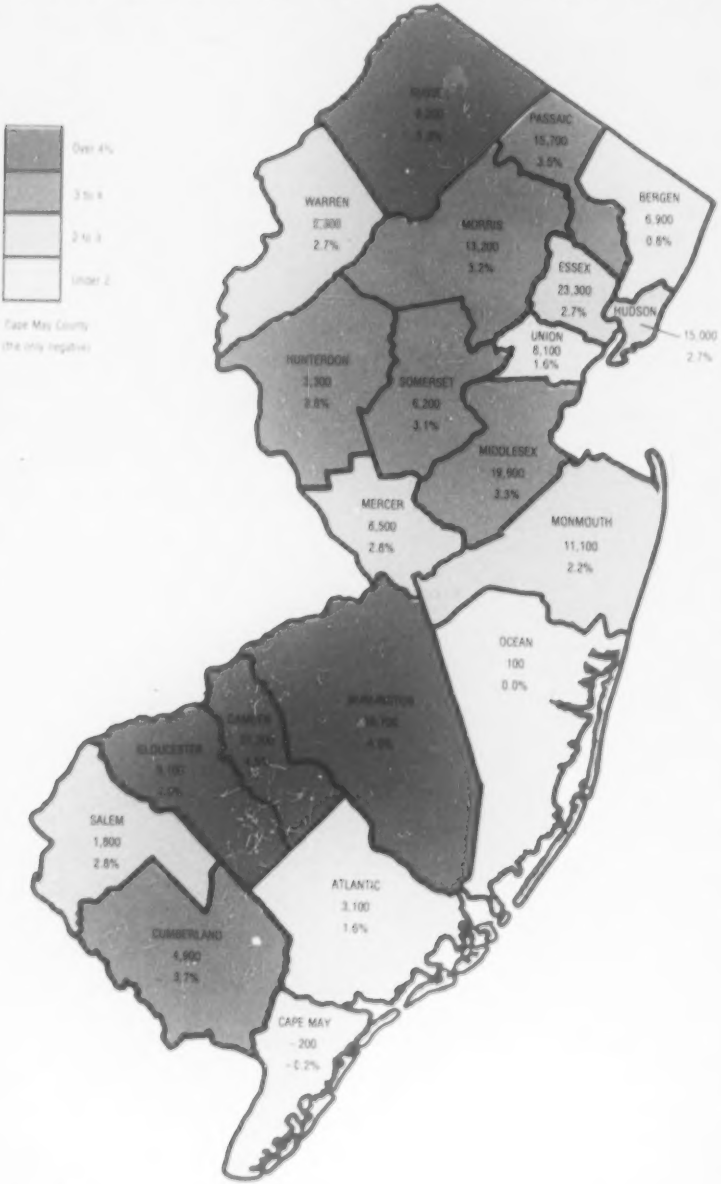


Source: (48)

Migration

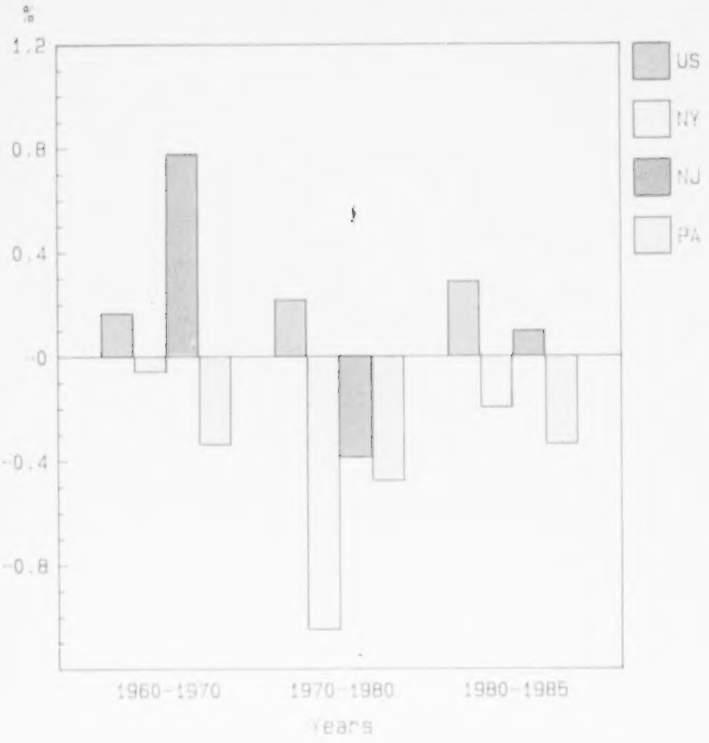
New Jersey's average annual rate of net migration (the net rate of in-and-out migration) has declined since 1960. Between 1960 and 1970 the average annual rate was still close to 0.8 percent, well above the national average (Figure 1.8). Between 1970 and 1980 net outmigration was recorded, while between 1980 and 1985 New Jersey's balance was positive (0.1 percent average annual rate). In the states of New York and Pennsylvania, outmigration has been prevailing all the time.

FIGURE 1.7
NEW JERSEY NET NATURAL INCREASE, By County, 1980–1986



Sources: (16) and (25)

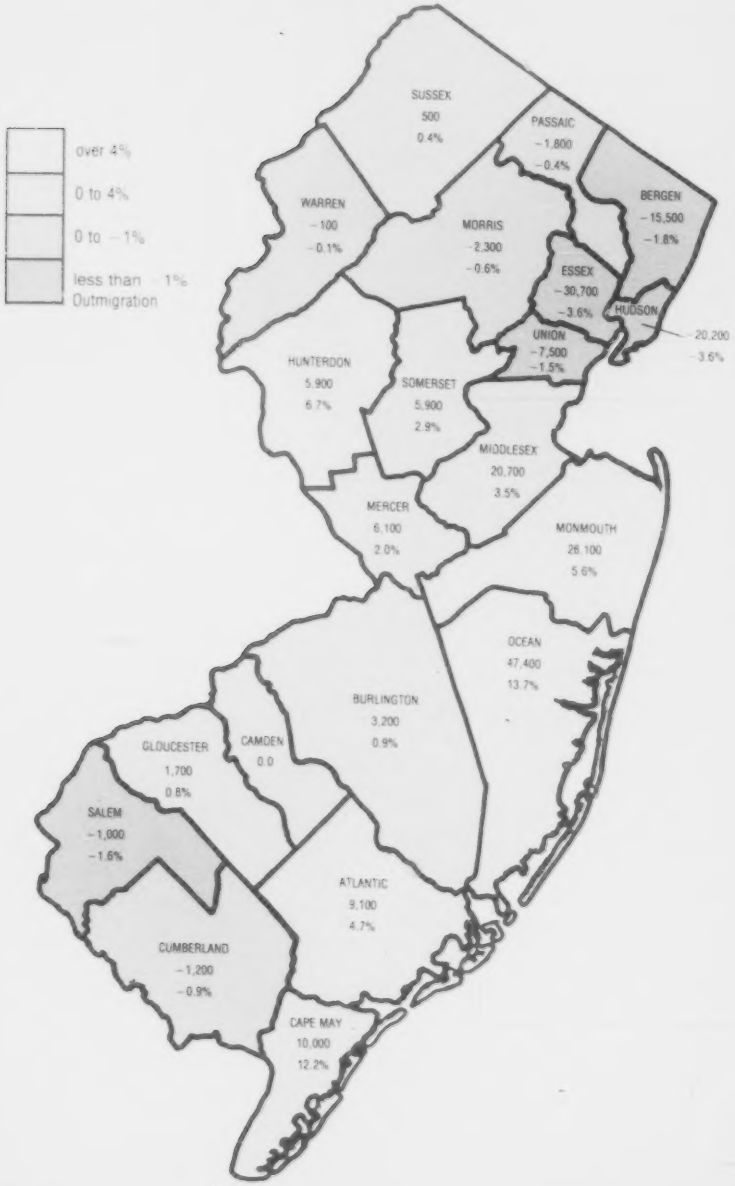
FIGURE 1.8
AVERAGE ANNUAL RATE OF NET MIGRATION
1960–1985



Source: (48)

Within New Jersey, as Figure 1.9 shows, Ocean County had the greatest positive net migration from 1980 to 1986 (+13.7%), followed by Cape May (over 12%), Hunterdon (6.7%) and Monmouth (5.6%). Several counties experienced net outmigration during the same time period, Essex and Hudson (3.6%) led the list, followed by Bergen (1.8%), Salem (1.6%), and Union (1.5%).

FIGURE 1.9
NEW JERSEY NET MIGRATION RATES
By County 1980–1986

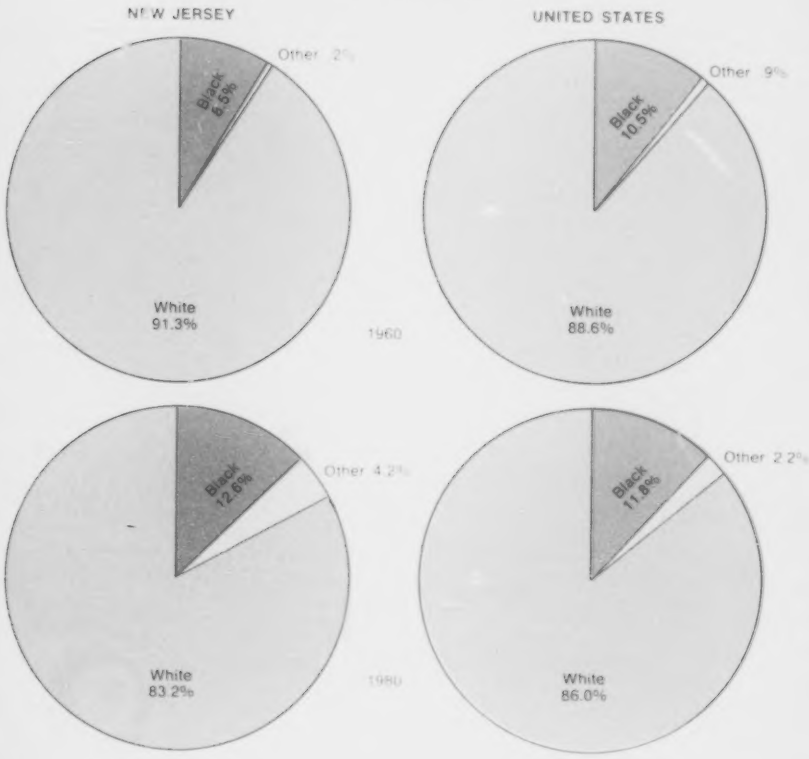


Source: (21)

5. RACIAL COMPOSITION

The racial composition of New Jersey's population more closely resembles that of the United States now than it had in the past. Between 1960 and 1980, New Jersey's share of white population, as opposed to "black" and "other," declined by more than eight percentage points and dropped from 2.7 percentage points above the U.S. share to 2.8 percentage points below it. (Figure 1.10).

FIGURE 1.10
RACIAL COMPOSITION OF THE POPULATION
United States and New Jersey
1960 and 1980



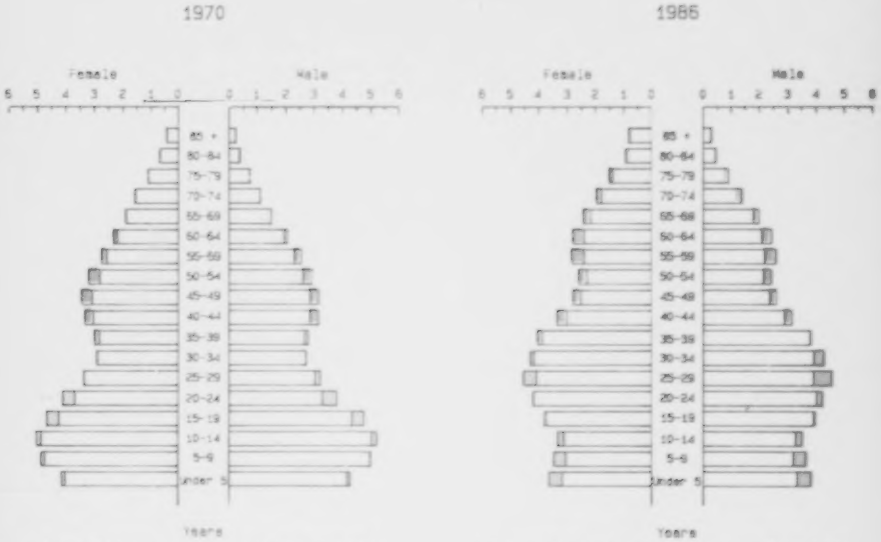
Source: (48)

6. AGE DISTRIBUTION

As displayed in Figure 1.11, New Jersey's population in 1986 is slightly older than that of the United States. In New Jersey 56.6 percent of the

population is above the age of 29, while only 53.1 percent of the U.S. population is above that age. New Jerseyans over 60 years of age constitute almost 18.2 percent of the State's population, 1.5 percentage point above the national figure.

FIGURE 1.11
AGE DISTRIBUTION OF THE UNITED STATES AND NEW JERSEY
1970 and 1986



Red: NJ proportion is less than U.S.

Blue: NJ proportion is more than U.S.

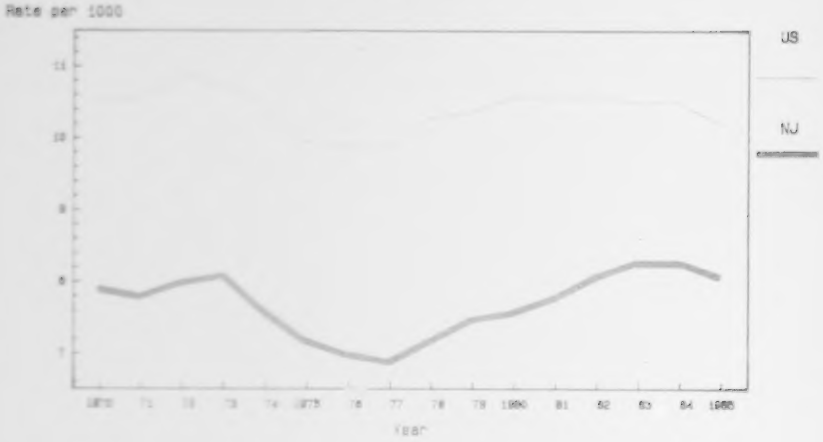
Source: (21)

The age distribution of New Jersey's population has been noticeably affected by the change in the rate of net natural increase. The declining birth rate, which has been dropping faster than the mortality rate, has diminished the proportion of people within the younger age groups, and increased the proportion of people in the older age groups.

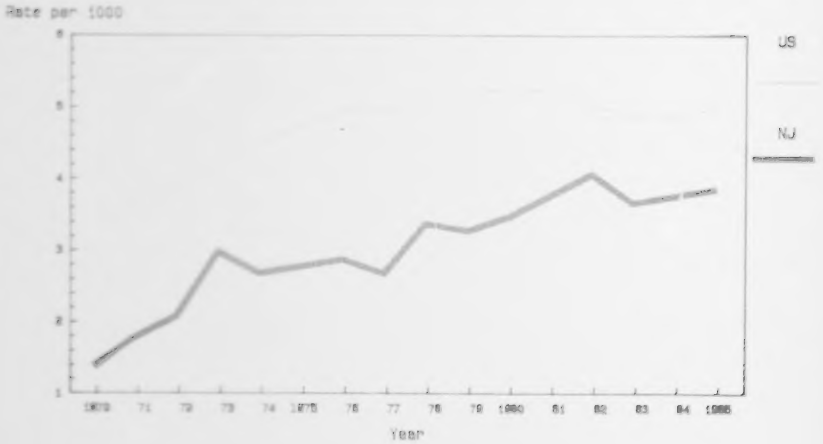
7. MARRIAGE AND DIVORCE

Marriage and divorce rates (the number of marriages and divorces per 1,000 population) in New Jersey have historically been lower than the United States figures (Figure 1.12). Marriage rates for the State ranged from 6.9 in 1977 to 8.3 in 1983–1984, while national rates were hovering between 9.9 to 10.9. New Jersey's divorce rate has climbed from 1.4

FIGURE 1.12
MARRIAGE AND DIVORCE RATES
United States and New Jersey
1970–1985



Marriages



Divorces

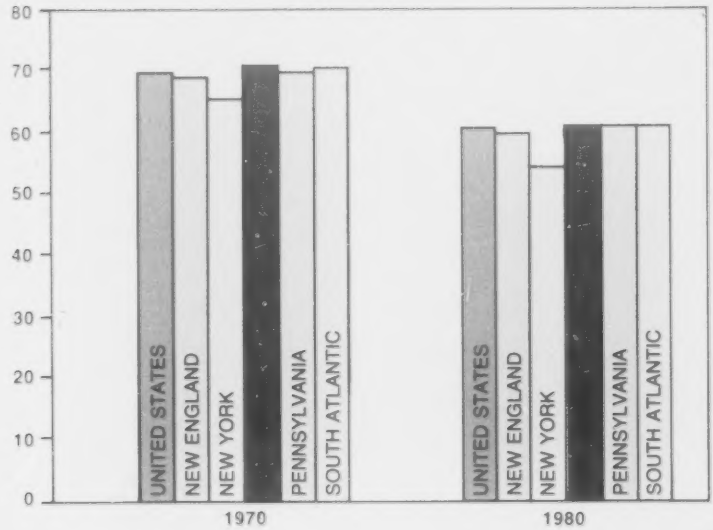
Source: (48)

divorces per thousand residents in 1970 to 4.1 in 1982. The national rates rose from 3.5 in 1970 to 5.3 around 1980, but fell slightly to 4.9 in 1983–1984.

8. HOUSEHOLDS AND FAMILIES

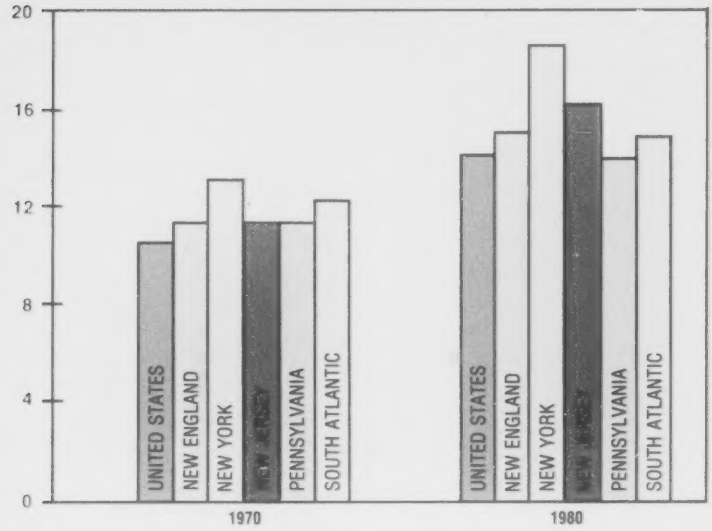
Partially due to an increase in divorce rates combined with a decrease in the marriage rate, the formation of New Jersey's families and households has changed, lowering the percent of husband and wife households. Between 1970 and 1980 the percentage of households with husband and wife present decreased over nine points (Figure 1.13), while the percentage of female-headed families increased by seven points (Figure 1.14).

FIGURE 1.13
HUSBAND/WIFE HOUSEHOLDS BY AREA, 1970 and 1980
(percent)



Source: (48)

FIGURE 1.14
FEMALE HEADS OF FAMILIES BY AREA, 1970 and 1980
(percent)



Source: (48)

II

EMPLOYMENT

II

EMPLOYMENT

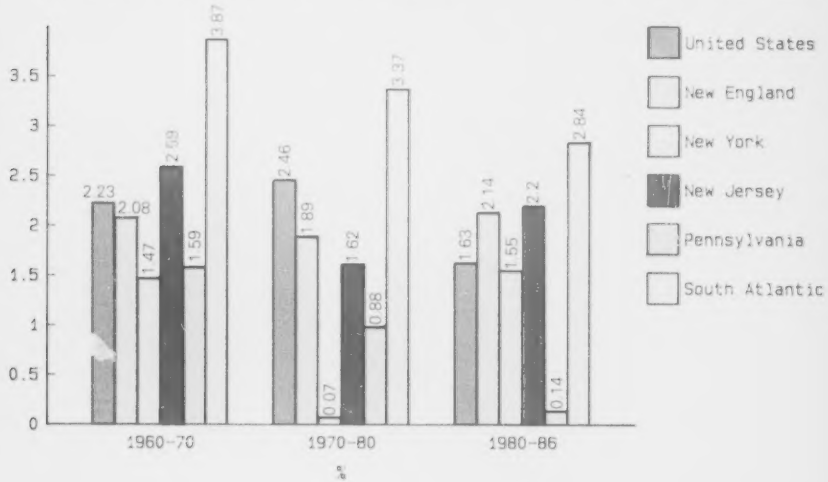
In 1986, 3.7 million New Jersey residents (48.5% of total population) were gainfully employed. The state's employment is concentrated in non-farm sectors, while employment in agriculture is very small. In addition, many New Jerseyans work out of state. Nonagricultural payroll employment by New Jersey establishments reached almost 3.5 million.

In recent years New Jersey's entire employment growth took place in nonmanufacturing sectors, while manufacturing employment, following a national trend, has been declining relative to other sectors and in absolute number of employed workers.

1. GROWTH IN EMPLOYMENT

In the 1970s, total nonagricultural employment in New Jersey grew at a rate significantly lower than that of the national average (Figure 2.1). However, the State has been outperforming the U.S. since 1980. It has also consistently fared better than its neighboring states over the past two and a half decades.

FIGURE 2.1
NONAGRICULTURAL EMPLOYMENT, AVERAGE ANNUAL RATE OF CHANGE



Sources: (48) and (54)

From 1960 to 1970 New Jersey's nonagricultural employment grew at an average annual rate of 2.59 percent, compared to 1.47 percent rate for New York and 1.59 percent for Pennsylvania. The respective rate for the entire United States was 2.23 percent.

From 1970 to 1980 New Jersey's average annual rate of increase was down to 1.62 percent in contrast to 2.46 percent for the United States. The State's growth rate, nevertheless, exceeded those for New York (0.07%) and Pennsylvania (0.98%).

In the most recent years New Jersey's rate of employment growth continued to be higher than that of its neighboring states and also higher than the national growth rate. From 1980 and 1986 the New Jersey average employment growth rate amounted to 2.20 percent per year, compared to 1.55 percent for New York state and 0.14 percent for Pennsylvania. The respective rate for the entire United States was 1.63 percent.

2. COMPOSITION OF EMPLOYMENT

The composition of employment—the distribution of jobs by sector — has changed markedly both in New Jersey and the United States. There has been a significant rise in the share of private service-producing and government employment, while the share of goods-producing employment has decreased (Table 2.1 and Figure 2.2).

TABLE 2.1
Share of Nonagricultural Employment by Sector, 1960 and 1986 (percent)

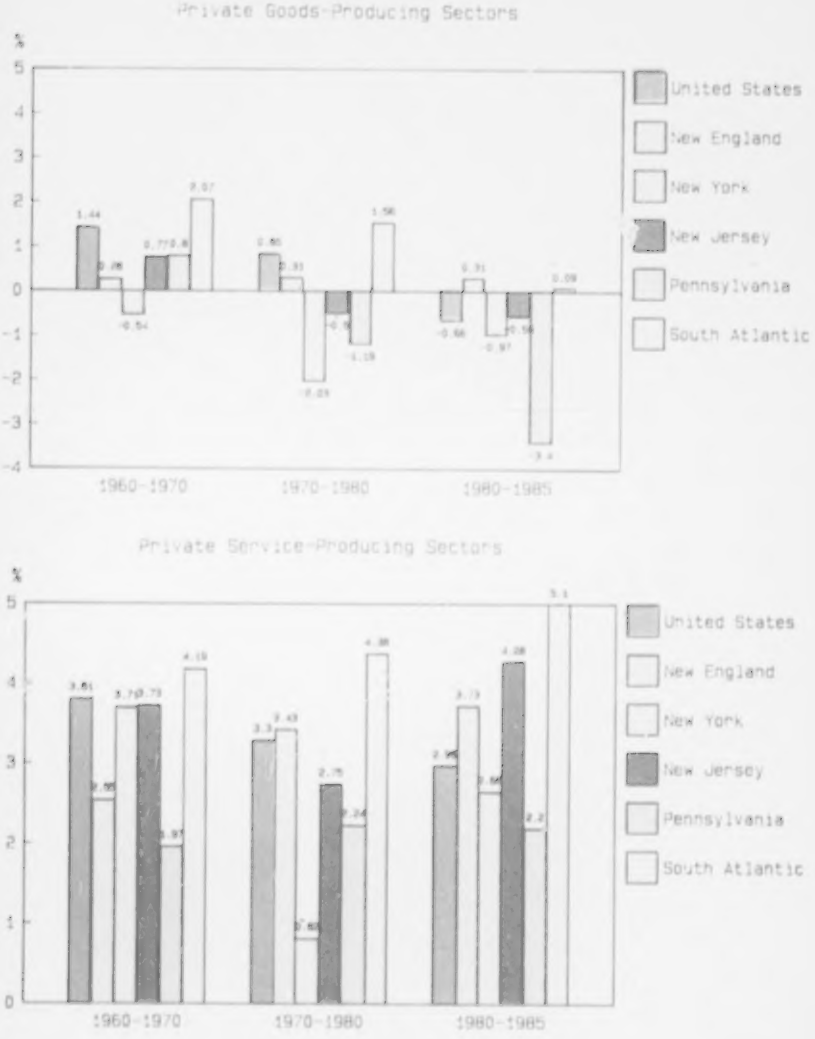
	1960			1986		
	Goods	Services	Government	Goods	Services	Government
United States	38	46	16	25	58	17
New England	44	44	13	27	60	13
South Atlantic	36	44	20	25	57	18
New York	35	52	13	20	63	17
New Jersey	45	43	12	24	60	15
Pennsylvania	44	44	12	27	59	14

Source: (55)

Private Goods Producing Sector

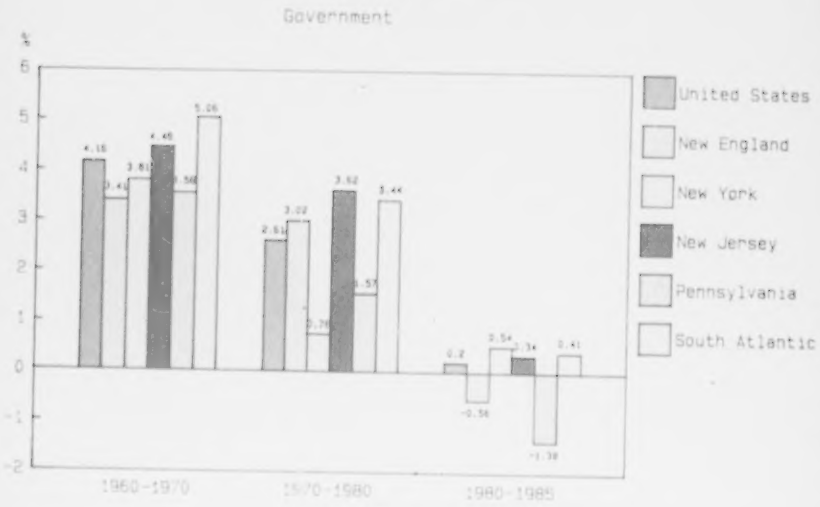
In the past, New Jersey had a much higher-than-average share of employment in the goods-producing sector, which includes manufacturing, construction and mining. This sector's share has been decreasing throughout the United States. Between 1960 and 1986 the share of the goods-producing sector in the U.S. declined from 38 percent to 25 percent, or by 13 points. The decline in the importance of the goods-producing sector was even more dramatic in New Jersey. The share of the goods-producing sector in New Jersey declined by 21 points and, in 1986, was slightly below the United States average.

FIGURE 2.2
EMPLOYMENT BY MAJOR SECTORS
AVERAGE ANNUAL RATE OF CHANGE
(percent)



(continued)

FIGURE 2.2 CONTINUED



Source: (55)

Private Service Sector Employment

The share (importance) of the private service-producing sector, which includes transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, has, since 1960, increased throughout the United State. The importance of the private service-producing sector increased in New Jersey from 43 percent in 1960 to 60 percent in 1986. New Jersey's increase was greater than that of the United States, where the share of the private-service producing employment was 46 percent in 1960 and 58 percent in 1986.

Public Sector Employment

In 1986, 15 percent of nonagricultural employment was in the government services sector. This figure was lower than those for the United States (17%), New York State (17%), South Atlantic region (18%). Government employment includes such areas as education, health and hospitals, police and fire, and other government services.

The share of public service employment increased in New Jersey from 12 percent in 1960 to 15 percent in 1986. Increases in that share were registered also for New York State (from 13% in 1960 to 17% in 1986); in Pennsylvania the share of government employment increased from 12 percent in 1980 to 14 percent in 1986; and the United States as a whole

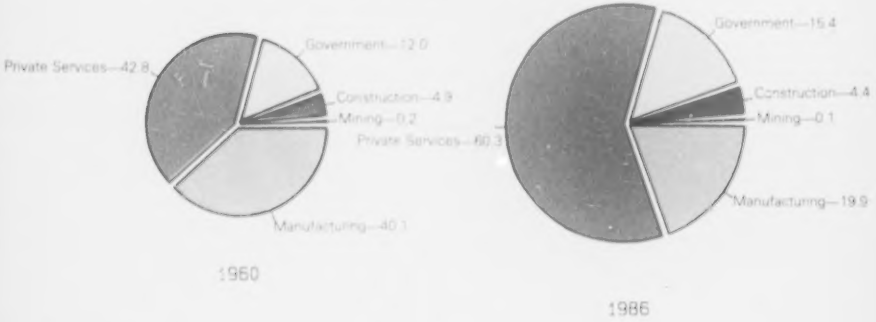
experienced a one percentage point increase in that share during the same period.

3. EMPLOYMENT SHARES BY SECTORS

New Jersey's employment underwent important changes in the last 26 years (Table 2.2). In 1960, New Jersey was heavily involved in manufacturing with 40.1 percent of all workers employed in this sector. By 1986, the number of employees in Manufacturing declined to 692,800 (from 808,000 in 1960) and the employment share of that sector declined to 19.9 percent (Figure 2.3). On the other hand, the Services sector (a sub-sector of service-producing) almost doubled its share in total employment in the last 26 years. In 1960, this sector employed 252,000, which was 12.5 percent of total nonagricultural employment. By 1986, its employment increased to 831,200 persons and its share rose to 23.8 percent.

The employment share of Wholesale and Retail Trade increased by five percentage points in the past 26 years and the number of employees increased from 374,500 in 1960 to 832,800 in 1986. Finance, Insurance and Real Estate employment share increased from 4.4 percent in 1960 to 6.0 percent in 1986. Although employment in Transportation, Communications and Public Utilities increased from 149,500 in 1960 to 229,800 in 1986, its share declined by 0.8 percentage point.

FIGURE 2.3
EMPLOYMENT IN NONAGRICULTURAL SECTORS
New Jersey, 1960–1986



Source: (21)

4. GEOGRAPHICAL EMPLOYMENT TRENDS

The State's sectoral distribution of employment is not geographically uniform. Statewide, the employment shares of manufacturing, wholesale and retail trade, and services differ only slightly; 19.9, 23.9, 23.8 percent,

Table 2.2
New Jersey Nonagricultural Employment by Sector, 1983 and 1986

	1960		1986	
	(000)	Percent	(000)	Percent
Total	2017.1	100.0	3486.9	100.0
Goods Producing	911.0	45.2	848.5	24.3
Manufacture	808.8	40.1	692.8	19.9
Construction	98.7	4.9	153.5	4.4
Mining	3.5	0.2	2.2	0.1
Service Producing	864.0	42.8	2,102.8	60.3
Wholesale & Retail	374.5	18.6	832.8	23.9
Finance, Insurance & Real Estate	88.0	4.4	208.9	6.0
Transportation, Communication & Public Utilities	149.3	7.4	229.8	6.6
Services	252.0	12.5	831.2	23.8
Government	242.2	12.0	535.7	15.4

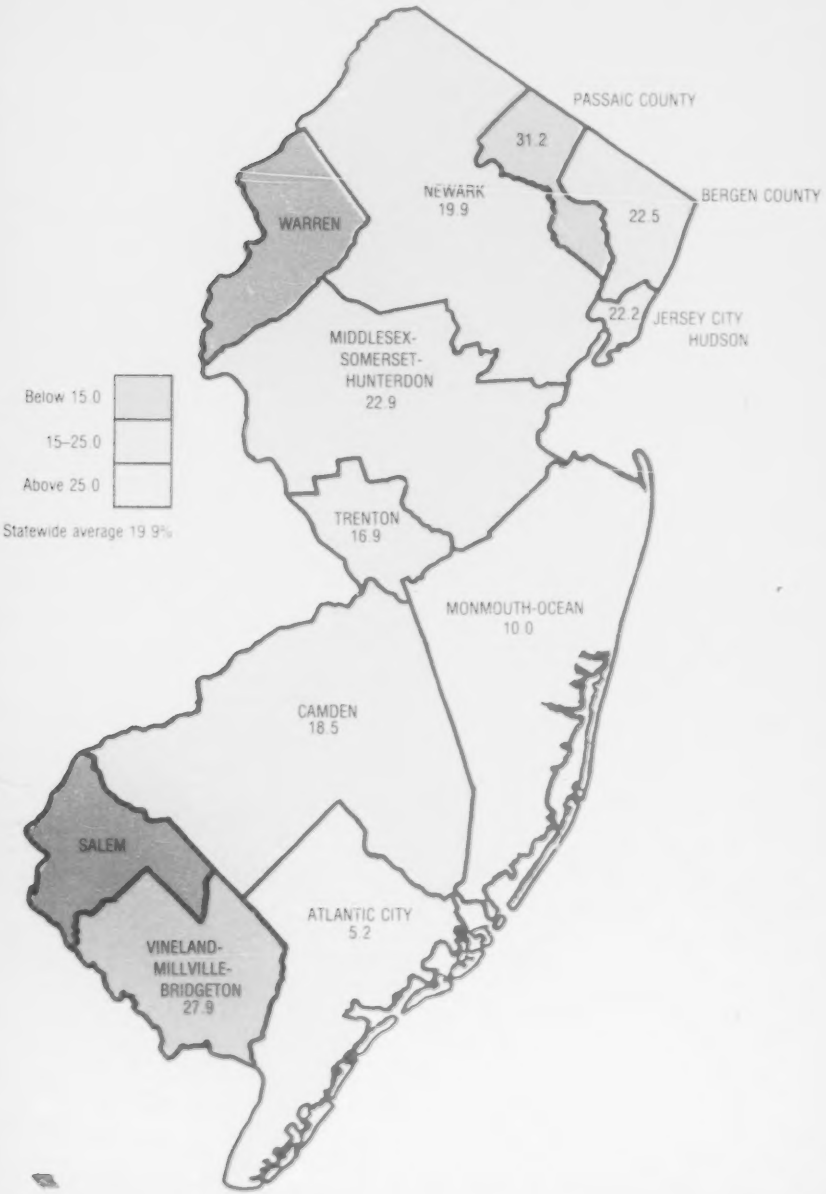
Source: (22)

respectively. However, manufacturing employment as a percent of total employment ranges from 31.2 percent in the Passaic labor market area to 5.2 percent in the Atlantic City labor market area (Figure 2.4). The share of trade employment is the highest in the Bergen County labor market area (31.2%), while in the Vineland-Millville-Bridgeton labor market trade accounts for 19.9 percent of total employment (Figure 2.5). The employment share of services ranges from 43.1 percent in the Atlantic City area to 17.2 percent in the Jersey City area (Figure 2.6).

5. AN OVERVIEW OF THE UNEMPLOYMENT PROBLEM

From 1972 to 1980, New Jersey's unemployment had been above the national unemployment rate. However, since 1981, New Jersey's rate has been below the national level (Table 2.3 and Figure 2.7). During the 1973–75 recession, New Jersey's unemployment rate increased much more than the national unemployment rate. National unemployment rate increased by 2.9 percentage points from 1972 to 1975, while New Jersey's rate increased by 4.4 percentage points. New Jersey's unemployment rate reached 10.2 percent in 1975, compared to 8.5 for the national average in the same year. During the 1981–82 recession, New Jersey's unemployment rate increased but did not reach the double-digit level, and remained consistently lower than the national rate. Moreover, New Jersey's unemployment rate was lower than that of the South Atlantic region but higher than in New England.

FIGURE 2.4
MANUFACTURING EMPLOYMENT BY LABOR MARKET AREAS*
(share in total, 1986)



Source: (21).
*Labor market area employment data by Sector are not available for Warren and Salem counties.

FIGURE 2.5
TRADE EMPLOYMENT BY LABOR MARKETS
(share in total, 1986)

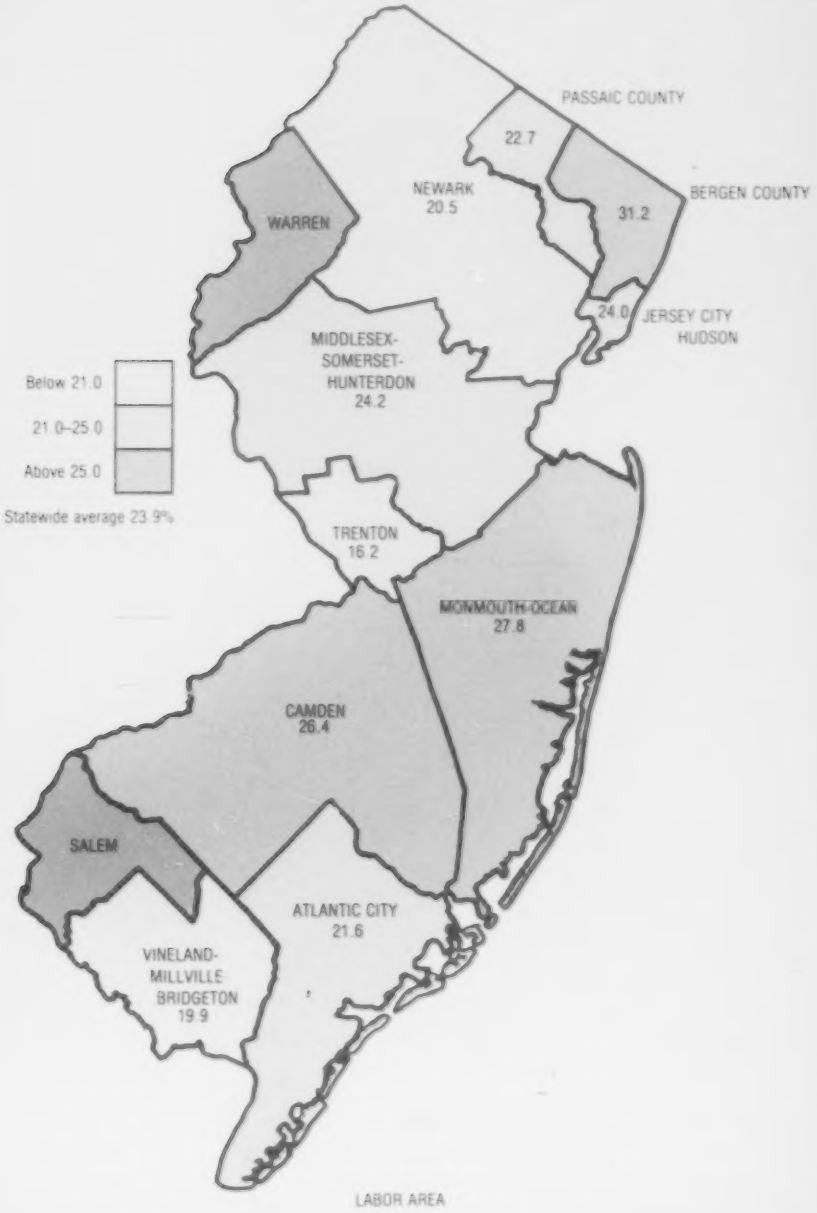
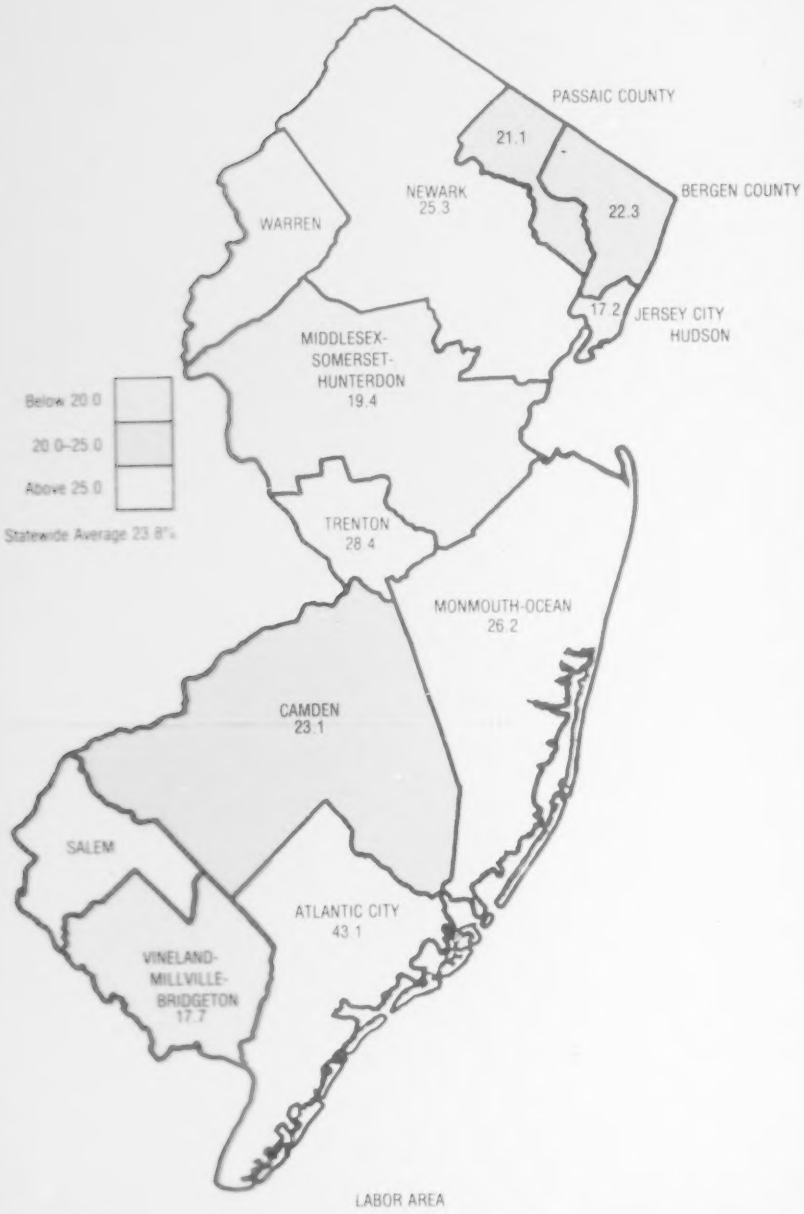


FIGURE 2.6
SERVICES EMPLOYMENT BY LABOR MARKET
(share in total, 1986)



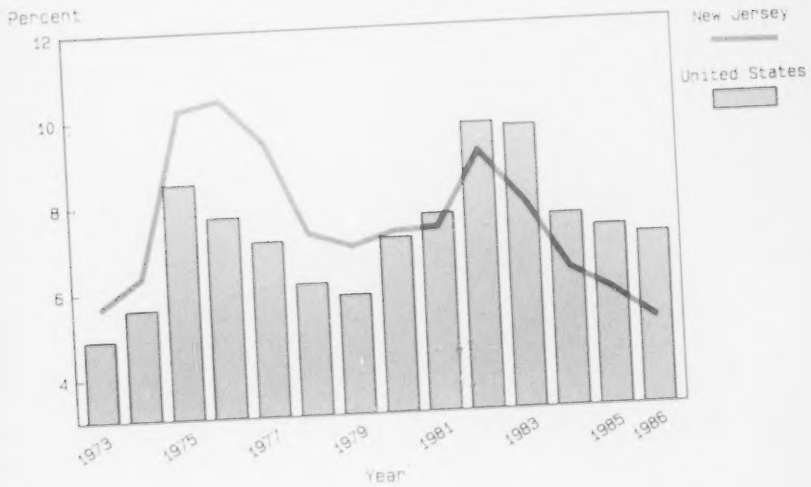
Source: (21)

Table 2.3
Comparative Unemployment Rates 1970-1986

Year	United States	New England	South Atlantic	New Jersey
1970	4.9	4.8	4.0	4.6
1971	5.9	6.9	4.7	5.7
1972	5.6	6.9	4.4	5.8
1973	4.9	6.0	4.2	5.6
1974	5.6	6.5	5.3	6.3
1975	8.5	10.4	8.4	10.2
1976	7.7	9.0	7.6	10.4
1977	7.0	7.6	7.2	9.4
1978	6.1	5.4	6.2	7.2
1979	5.8	5.4	6.0	6.9
1980	7.1	6.3	6.9	7.2
1981	7.6	6.3	7.5	7.3
1982	9.7	7.9	10.3	9.0
1983	9.6	6.8	8.5	7.8
1984	7.5	4.9	6.5	6.2
1985	7.2	4.4	6.1	5.7
1986	7.0	3.9	5.9	5.0

Sources: (48) and (55)

FIGURE 2.7
COMPARATIVE UNEMPLOYMENT RATES
1973–1986



Source: (22)

Unemployment Within the State

Unemployment rates vary significantly across the State. The unemployment rates in 1986 ranged from a high of 9.3 percent in the Vineland-Millville-Bridgeton labor market area and a low of 3.8 percent in Middlesex-Somerset-Hunterdon, while the statewide unemployment rate was 5.0 percent (Figure 2.8). The Atlantic City, Jersey City, Salem, and Vineland-Millville-Bridgeton and Newark areas were all above the statewide rate in 1986 (Table 2.4). All of these areas have had rates higher than the statewide since 1980.

Table 2.4
Unemployment Rates, New Jersey Labor Market Areas
1980–1986

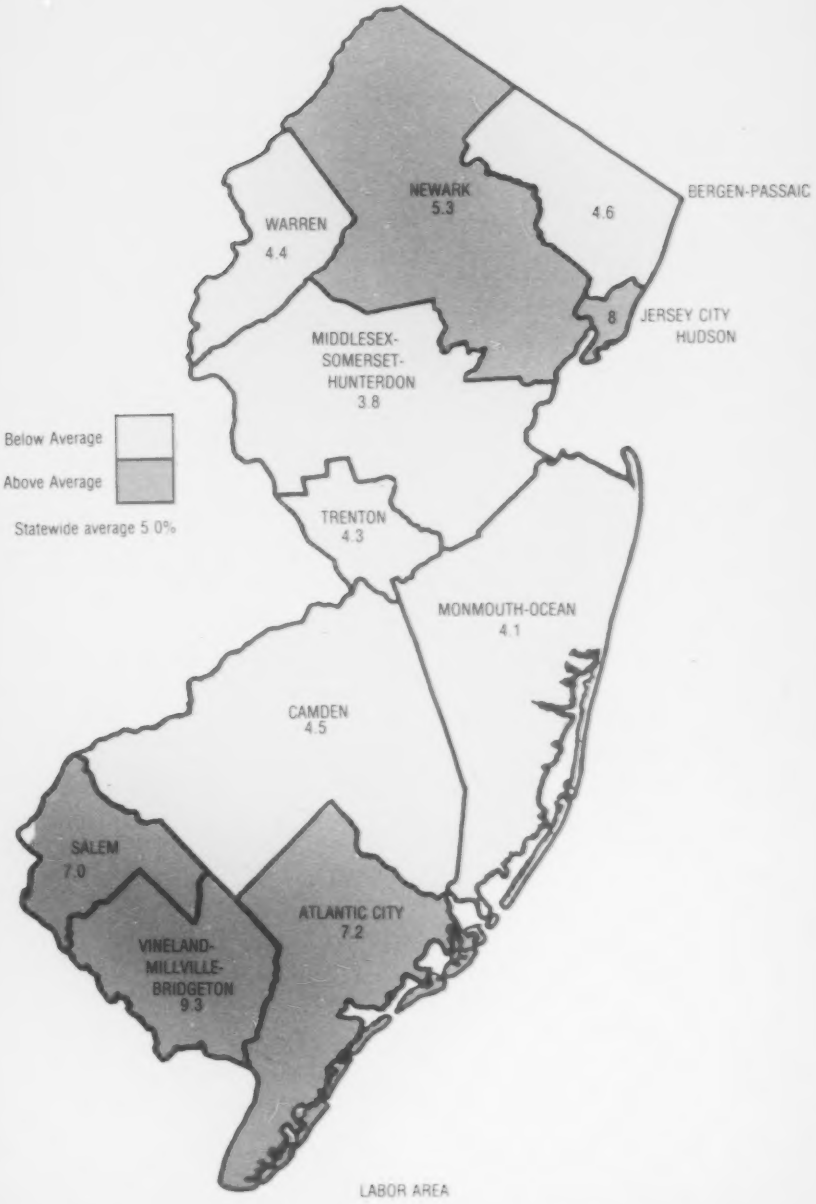
	1980	1981	1982	1983	1984	1985	1986
Statewide	7.2	7.3	9.0	7.8	6.2	5.7	5.0
Atlantic City	9.8	10.1	12.1	11.1	9.4	8.5	7.2
Bergen-Passaic	6.9	6.8	8.4	7.5	5.7	5.3	4.6
Camden	6.3	6.6	8.0	7.1	5.5	5.0	4.5
Jersey City	10.1	10.7	13.1	11.6	10.0	9.4	8.0
Middlesex-Somerset-Hunterdon	5.9	5.9	7.6	6.7	4.9	4.3	3.8
Monmouth-Ocean	7.1	7.1	8.2	7.0	5.3	4.6	4.1
Newark	7.4	7.4	8.9	7.6	6.1	5.9	5.3
Salem	7.4	7.8	8.7	9.1	6.1	6.0	7.0
Trenton	7.0	6.3	8.5	6.8	5.2	4.7	4.3
Vineland-Millville-Bridgeton	10.9	12.5	16.2	14.0	12.8	10.5	9.3
Warren	5.4	6.2	7.6	7.3	5.1	4.9	4.4

Source: (27)

Demographics of Unemployment

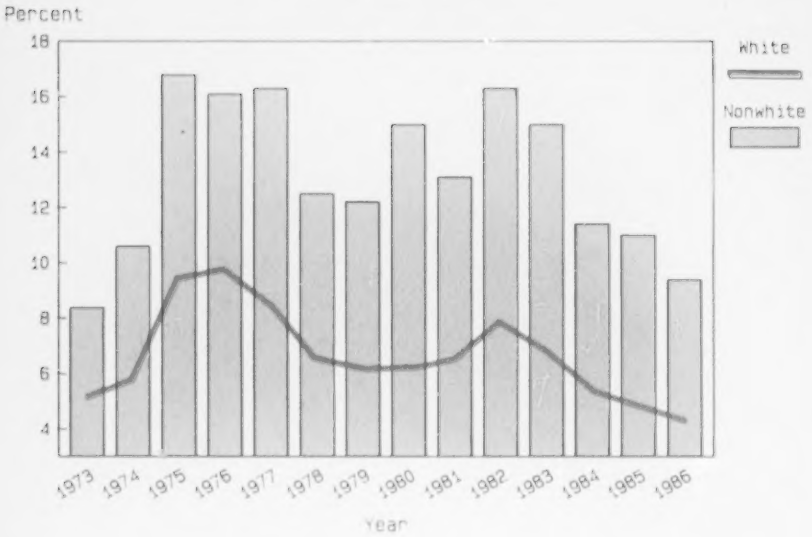
New Jersey's unemployment rates vary among the state's various ethnic groups and between sexes. New Jersey's non-white unemployment rate in 1986 was 9.4 percent, while the white unemployment rate was 4.3 percent (Table 2.5 and Figure 2.9). Unemployment rates for females are higher than for males (Table 2.6 and Figure 2.10). In 1986, the unemployment rate for females was 5.5 percent, while it was 4.6 percent for males. The unemployment of teenagers 16–19 years of age was, in 1986, more than double the overall unemployment total rate (12.8% vs. 5.0%).

FIGURE 2.8
UNEMPLOYMENT RATES BY LABOR MARKET AREAS, 1986
(percent)



Source: (27)

FIGURE 2.9
UNEMPLOYMENT RATES, 1973–1986
(white vs. nonwhite)



Source: (55)

Table 2.5
New Jersey Unemployment Rates
(White vs. Nonwhite) 1970-1986

Year	White	Nonwhite	Total
1970	4.1	8.2	4.6
1971	5.3	9.6	5.7
1972	5.2	10.5	5.8
1973	5.2	8.4	5.6
1974	5.8	10.6	6.3
1975	9.5	15.8	10.2
1976	9.8	16.1	10.4
1977	8.5	16.3	9.4
1978	6.5	12.5	7.2
1979	6.2	12.2	6.9
1980	6.2	15.0	7.2
1981	6.5	13.1	7.3
1982	7.9	16.3	9.0
1983	6.8	15.0	7.8
1984	5.4	11.4	6.2
1985	4.8	11.0	5.7
1986	4.3	9.4	5.0

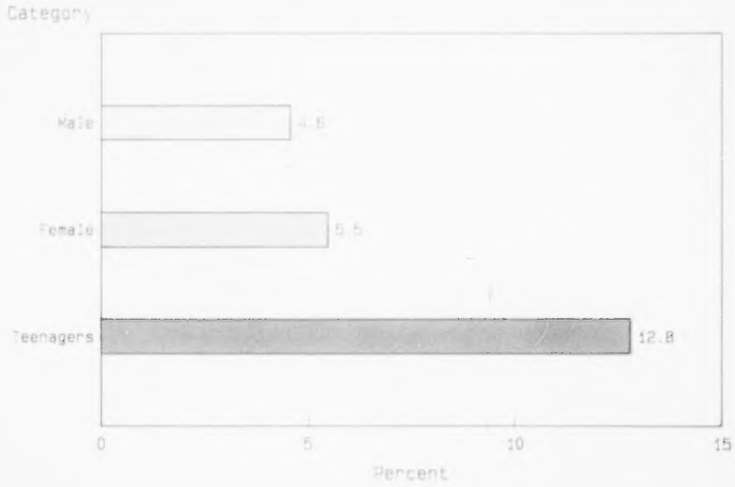
Source:(55)

Table 2.6
New Jersey Unemployment Rates for Males and Females and Teenagers, 16–19, 1975–1985

	Male	Female	Teenagers 16–19
1975	9.5	11.4	21.6
1976	9.7	11.5	22.3
1977	8.0	11.3	21.9
1978	6.2	8.6	17.6
1979	6.2	7.9	18.9
1980	6.6	8.1	20.2
1981	6.7	8.1	23.2
1982	8.6	9.4	22.5
1983	7.4	8.4	21.2
1984	6.0	6.4	17.7
1985	5.1	5.3	14.8
1986	4.6	5.5	12.8

Source: (56)

FIGURE 2.10
NEW JERSEY UNEMPLOYMENT RATES, 1986



Source: (55)

III

INCOME

III

INCOME

1. TOTAL AND PER CAPITA INCOME

Income is a topic of prime importance, not only for individual households and residents but also for businesses seeking markets for their goods and services.

Personal income is the income of residents from all sources. According to the latest calculations, New Jersey's total personal income increased during the past sixteen years at an average annual rate of 9.23 percent, reaching almost $142 billion in 1986 (Table 3.1).

Table 3.1
New Jersey Personal Income
(current dollars)

Year	Total (million $)	Per Capita
1970	34,549	4,805
1971	37,161	5,103
1972	40,290	5,492
1973	44,012	6,000
1974	47,908	6,531
1975	51,328	6,991
1976	56,070	7,635
1977	61,290	8,348
1978	68,047	9,250
1979	75,769	10,277
1980	85,414	11,579
1981	95,189	12,853
1982	102,666	13,823
1983	111,163	14,894
1984	122,190	16,268
1985	131,542	17,398
1986	141,919	18,626

Source: [36]

Table 3.2
Per Capita Income
Current Dollars
1970-1986

	1970	1980	1985	1986
United States	4,051	9,919	13,907	14,641
New England	4,445	10,542	15,939	17,166
New York	4,855	10,718	15,942	17,111
New Jersey	4,805	11,579	17,398	18,626
Pennsylvania	4,042	9,893	13,546	14,249
South Atlantic	3,694	9,171	13,302	14,086

Sources: (36)

Per capita personal income is the total personal income of residents divided by the resident population. New Jersey's per capita income was $18,626 in 1986, which ranked second only to Connecticut ($19,600) and was 27 percent above the United States average of $14,641. From 1973, New Jersey's per capita income has been higher than that of any of its surrounding states (Table 3.2).

Table 3.3
New Jersey Per Capita Personal Income by County
Current Dollars
1970 and 1984

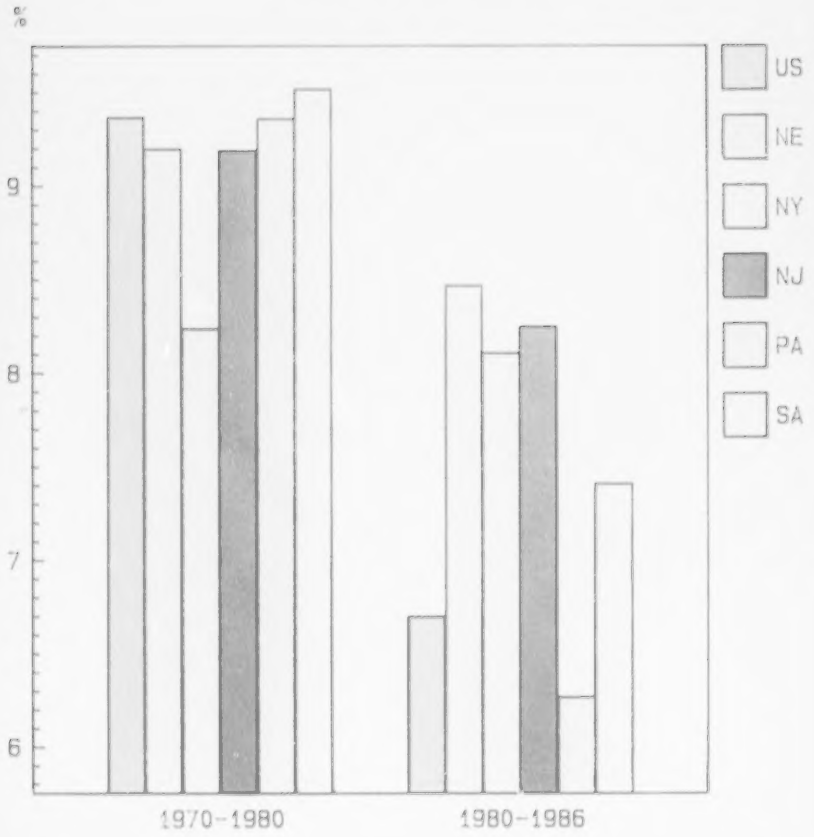
	1970	1984	Average Annual Growth (%)
Atlantic	4,089	14,462	9.6
Bergen	5,898	19,892	9.1
Burlington	4,369	13,598	8.4
Camden	4,161	13,224	8.6
Cape May	3,893	13,822	9.5
Cumberland	3,713	11,221	8.2
Essex	4,859	14,282	8.0
Gloucester	3,661	12,478	9.1
Hudson	4,254	12,147	7.8
Hunterdon	4,648	18,040	10.2
Mercer	4,458	15,067	9.1
Middlesex	4,521	15,805	9.4
Monmouth	4,532	15,529	9.2
Morris	5,273	19,518	9.8
Ocean	3,926	13,543	9.2
Passaic	4,470	13,722	8.3
Salem	4,046	11,905	8.0
Somerset	5,423	19,598	9.6
Sussex	4,245	13,712	8.7
Union	5,487	17,479	8.6
Warren	4,090	14,044	9.2

Source: (22) and (24)

The Nationwide Trend

New Jersey's per capita income increased at an average annual rate of 8.25 percent from 1980 to 1986, over 1.5 percentage point more than the national average rate of 6.7 percent. During that period, Pennsylvania had the lowest rate of increase in the Middle Atlantic Region, while between 1970 and 1980 its rate was the highest. Figure 3.1 shows that the nominal per capita income growth rates were generally higher during the 1970s than in the 1980s, mainly because of higher rates of inflation in the 1970s.

FIGURE 3.1
NOMINAL PER CAPITA INCOME AVERAGE ANNUAL GROWTH RATES
1970–1980 and 1980–1986



Sources: (48) and (61)

FIGURE 3.2
NEW JERSEY PER CAPITA PERSONAL INCOME BY COUNTY, 1984
Current Dollars

Source: (22)

Distribution and Growth Within the State

Per capita personal income in New Jersey is not equally distributed throughout the State. In 1984, per capita personal income ranged from a high of $19,892 in Bergen County to a low of $11,221 in Cumberland County (Table 3.3 and Figure 3.2). All of the southern counties had lower per capita personal income levels than the statewide level ($16,268).

Sources of Income

New Jersey's labor and proprietors' income has decreased as a percent of total income over the years (Figure 3.3). In 1965, net resident labor and proprietors' income in New Jersey was 80.2 percent of total personal income; by 1984 it accounted for 69.9 percent. Property income (rents, dividends, and interest) increased from 13.4 percent in 1965 to 18.1 percent in 1984, an increase of 4.7 percentage points, while the share of transfers (unemployment benefits, social security payments, etc.) almost doubled from 6.4 percent to 12.0 percent.

In comparing New Jersey's sources of income with their national counterparts, New Jersey has had a higher share of labor and proprietors' income. In 1965, 78.2 percent of the nation's total income came from labor and proprietors' income, while in 1984 this source accounted for 67.2 percent. Transfers increased, as in New Jersey, and property income also increased from 14.3 percent in 1965 to 19.0 percent in 1984, an increase of 4.7 percentage points, the same as in New Jersey for the same period of time.

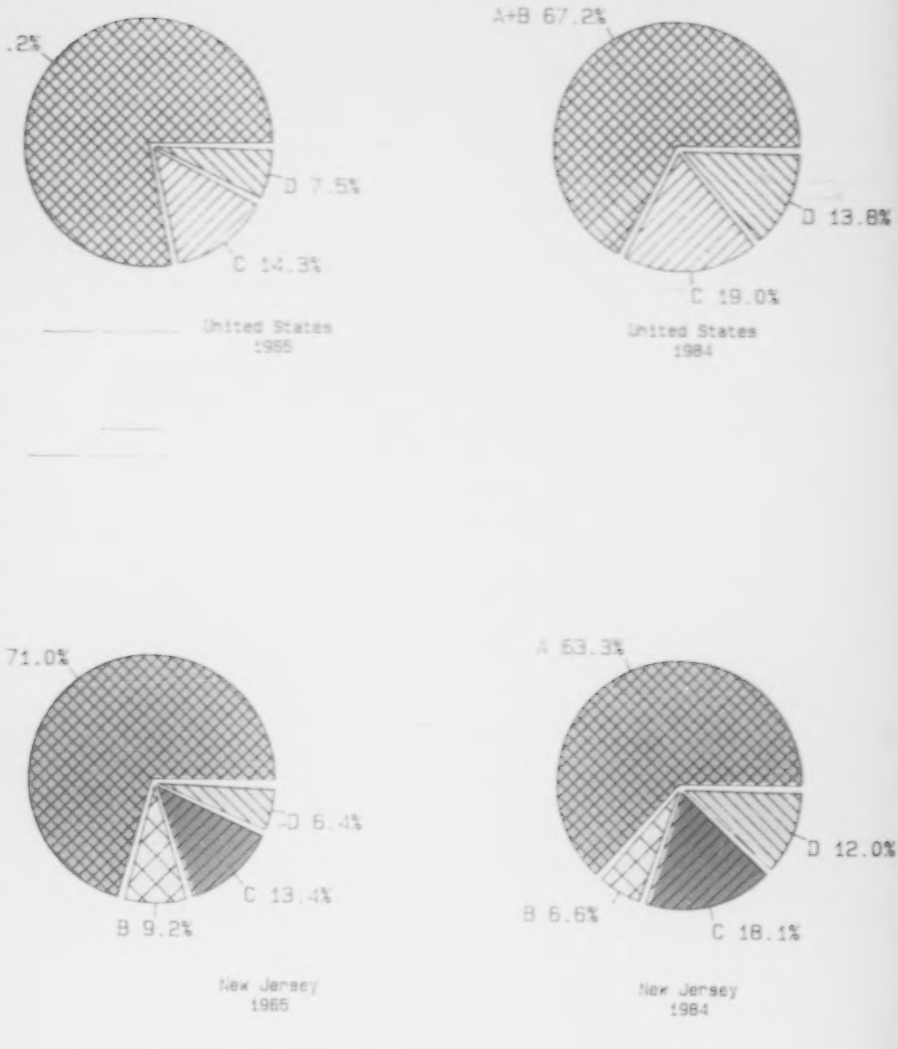
Proprietors' income has decreased in the composition of labor and proprietors' income both in New Jersey and the United States. In 1965, New Jersey's proprietors' income was 10.1 percent of total labor and proprietors' income compared to 13.1 percent in the United States (Figure 3.4). In 1982 the share of proprietors' income was less than 4.7 percent in New Jersey and 6.0 percent for the nation as a whole. By 1984 the shares reached 5.6 and 7.0 percent, respectively. The share of proprietors' income declined faster during the recession years in the United States as well as in New Jersey.

Table 3.4 shows goods-producing and service-producing shares of total nonagricultural employment and total nonagricultural wage and salary income in 1970 and 1986. In 1970, the goods-producing sector accounted for 37.8 percent of total employment, but 42.9 percent of wage and salary income. By 1986, the shares had dropped to 24.3 and 29.2 percent, respectively. Service-producing shares of employment and income rose during the two years as the economy turned away from goods and toward services.

In 1970, the income/employment share was 1.136 in the goods-producing sector compared to 0.917 in the service-producing sector. This signifies that goods sector employees received more than their employment share of total income and, services received less than their share.

Goods-sector employees increased their lead over services by 1986, increasing their index to 1.201. Services employees also gained (from 0.917 to 0.935) but their growth lagged behind goods employees.

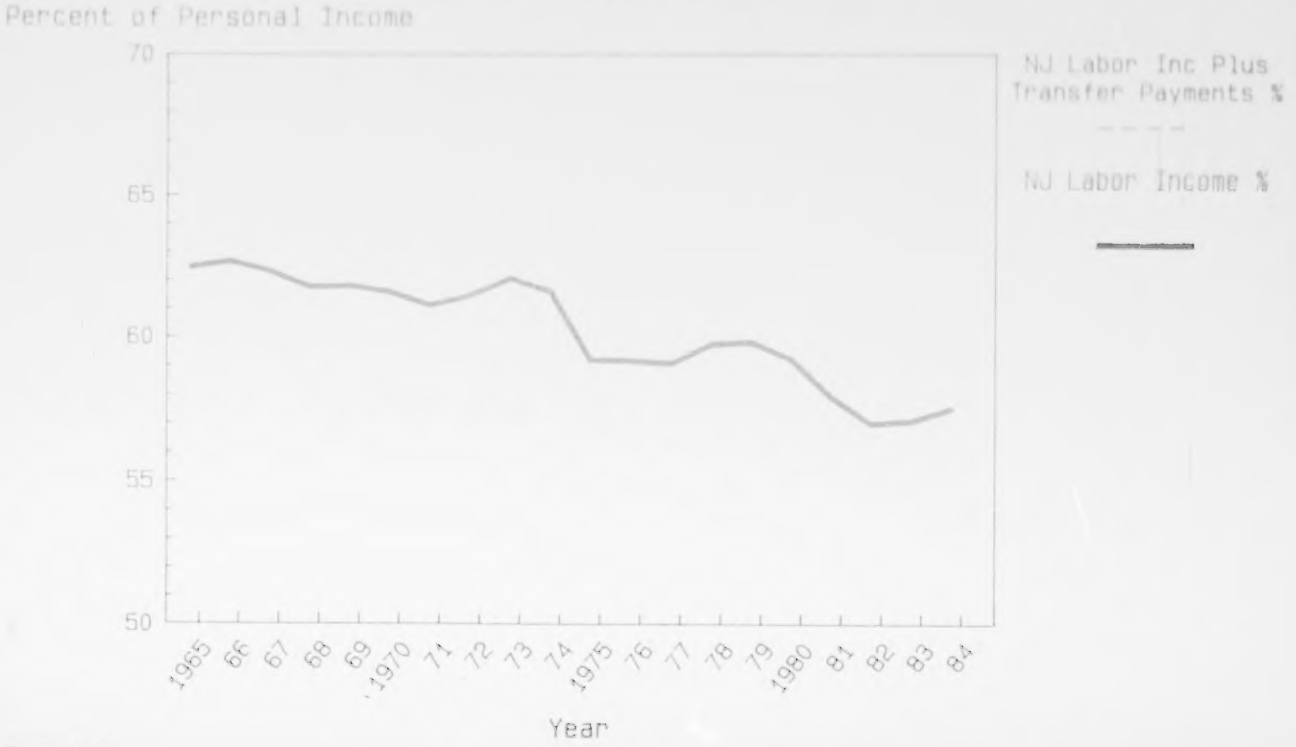
FIGURE 3.3
SOURCES OF RESIDENT PERSONAL INCOME
United States and New Jersey
1965 and 1984



A = Net Resident Labor and Proprietors Income
B = Net Earned Out of State
C = Dividends, Interest and Rent
D = Transfer Payments

Source: (36)

FIGURE 3.4
LABOR INCOME AND TRANSFER PAYMENTS
AS A PERCENT OF PERSONAL INCOME, 1965-1984



Source: (51)

Table 3.4
Changes in Sectoral Shares
New Jersey Nonfarm Employment and Wage and Salary Incomes 1970–1986

	1970		1986			
					Ratio of Income to Employment Shares	
Sector	Share of Total Employment (1)	Share of Total Income (%) (2)	Share of Total Employment (3)	Share of Total Income (4)	1970 (5)	1986 (6)
Goods Producing	.37768	.42914	.24333	.29222	1.13625	1.20092
Service-Producing	.62232	.57086	.75667	.70778	.91731	.93539
Nonagricultural Employment	1.00000	1.00000	1.00000	1.00000		

Source: (22)

Income of Families

New Jersey's median family income in 1979 was $22,830 (i.e., 50 percent of New Jersey families had incomes below $22,830), the fifth highest in the nation (see Table 3.5). New York and Pennsylvania were twentieth and twenty-first, respectively.

Table 3.5
Median Family Income and Rank*
United States, New Jersey, New York and Pennsylvania

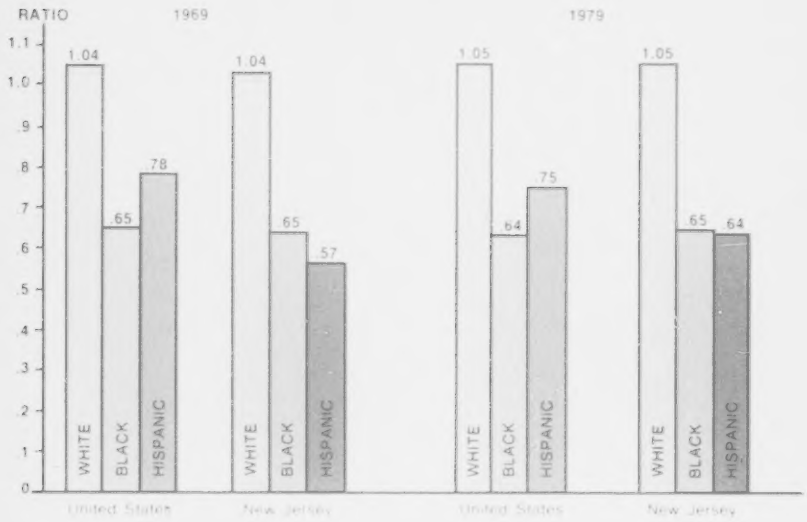
	1959	1969	1979
United States	$5,600	$9,586	$19,908
New Jersey	6,786 (3)	11,403 (4)	22,830 (5)
New York	6,731 (7)	10,609 (11)	20,385 (20)
Pennsylvania	5,719 (21)	9,554 (21)	20,259 (21)

*Ranks are given in the parentheses.
Source: (48)

The mean (average) family income for minority families is significantly lower than for whites in the nation as a whole; New Jersey also follows this pattern (Figure 3.5). White families of New Jersey and the United States had mean incomes four percent above the averages for all races in 1969 and five percent above in 1979. The black family's relative mean income level rose, for the nation as a whole, from 65 percent to 69 percent of overall average, while New Jersey's black family relative mean income

remained unchanged at the 65 percent level. There was a relative increase in New Jersey's Hispanic family mean income, from 57 percent in 1969 to 64 percent in 1979. In the United States, mean income of the Hispanic families was higher than that of black families; the opposite was true for New Jersey.

FIGURE 3.5
MEAN FAMILY INCOME OF RACIAL GROUPS
AS RATIOS TO OVERALL MEANS
1969–1979



Source: (45)

Table 3.6 shows that there was no significant change in the distribution of income among New Jersey families from 1959 to 1979. While the lower 41 percent of all families shared about 20 percent of total income in 1959, their share declined somewhat by 1979 to about 18 percent.

Table 3.6
New Jersey's Family Income Distribution
1959 vs. 1979

1959		1979	
Percent of Household*	Share of Total Family Income	Percent of Household*	Share of Total Family Income
11.41%	2.43%	10.56%	1.75%
27.75	10.86	27.80	9.19
40.56	19.77	41.40	18.27
62.92	39.44	62.21	37.07
77.96	56.43	77.22	54.92
98.29	93.51	97.72	92.17

*In ascending order from lower to higher income.
Source: (41)

2. POVERTY

The percentage of families below the poverty level has decreased in the State and the nation. In 1959, 11.4 percent of New Jersey's families were below the poverty level; by 1979 the proportion decreased to 7.6 percent. The national rate of poverty fell from 21.4 percent in 1959 to 9.6 percent in 1979 (Figure 3.6). Even though New Jersey's poverty rate decreased from 1959 to 1979, it was higher than the 1969 level of 6.1 percent.

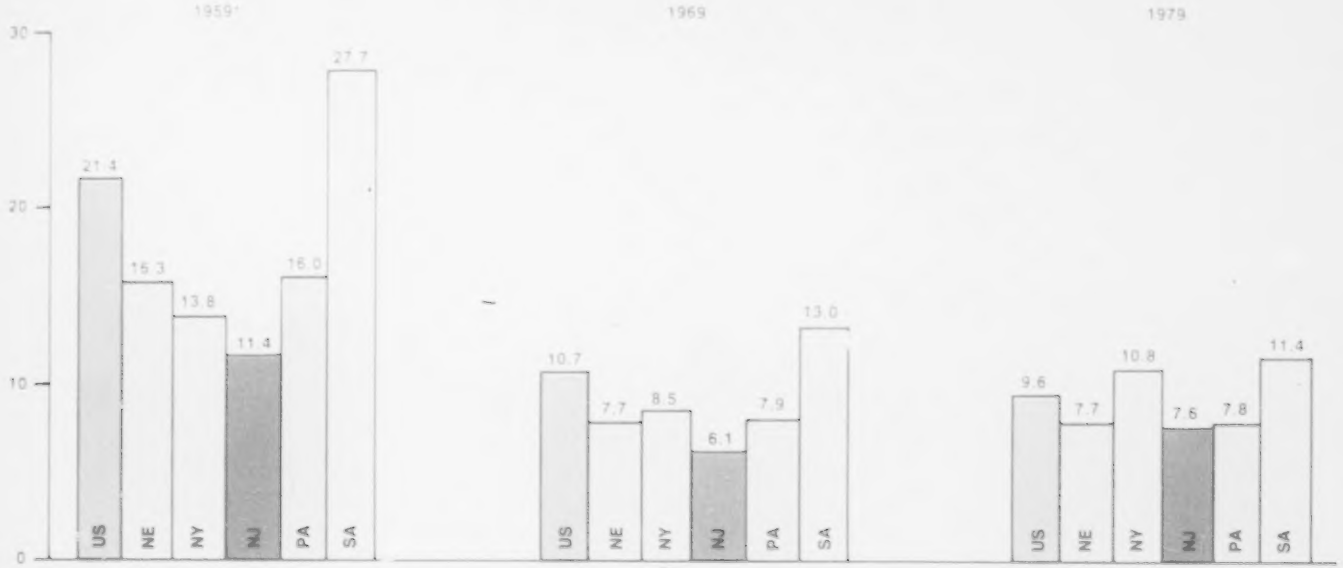
Minorities

The percentages of persons below the poverty level in New Jersey and the nation as a whole are significantly higher for minorities (Figure 3.7) than for whites. In 1969, New Jersey's white poverty rate was 6.4 percent; for blacks it was 22.6 percent and 27.5 percent for persons of Spanish-origin. The national rates were higher than New Jersey's rates for white and black persons with 10.9 percent and 35 percent, respectively; persons of Spanish-origin had a lower rate with 23.5 percent. In 1979, all of the rates for the United States decreased, while the rate for blacks in New Jersey increased to 25.9 percent.

Senior Citizens

Poverty rates for senior citizens have dropped significantly from 1969 to 1979 (Figure 3.8). In New Jersey, the 1969 poverty rate of persons over 65 was 18.8 percent in comparison with the overall poverty rate of 8.1 percent. By 1979, the New Jersey senior citizen poverty rate was down to 9.9 percent, very close to the overall poverty rate of 9.5 percent. The United States figures also decreased substantially; in 1969 the senior citizens poverty rate was 27.1 percent and 15.2 percent in 1979.

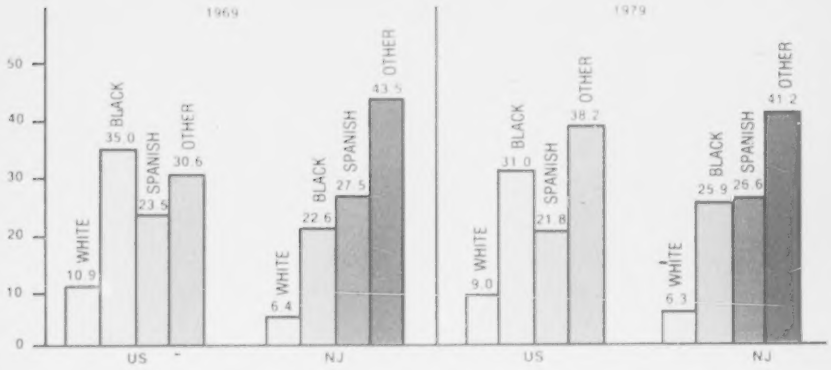
FIGURE 3.6
PERCENT OF FAMILIES BELOW POVERTY LEVEL
1959–1979



*Percent of families with incomes under $3,000.

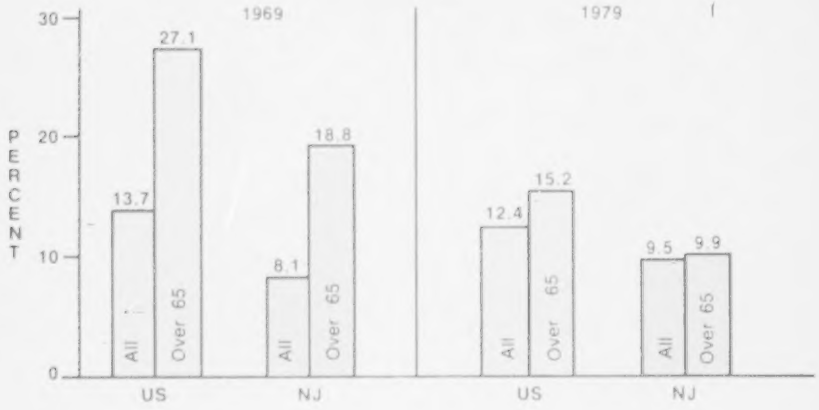
Source: (23)

FIGURE 3.7
PERCENT OF PERSONS BELOW POVERTY LEVEL BY RACE
1969–1979



Source: (48)

FIGURE 3.8
POVERTY RATES, ALL PERSONS, AND PERSONS OVER 65
1969–1979



Source: (48)

IV

AGRICULTURE AND NATURAL RESOURCE INDUSTRIES

IV

AGRICULTURE AND NATURAL RESOURCE INDUSTRIES

Introduction

Agriculture remains an important sector of the New Jersey economy. It supplies the local markets with fresh fruits, vegetables and other crops and exports to other countries as well. It provides income for several thousand families. This Chapter reviews the development of the Garden State's agricultural sector, commercial fishing, forests and parks, and mineral resources in New Jersey.

1. AGRICULTURE

Number and Size of Farms

Table 4.1 presents data on the number of farms, farmland and the average size of farms for 1986.

Table 4.1
Number and Average Size of Farms
United States and Regions, 1986

	Number of Farms	Farmland (thousand acres)	Average Size of Farm (acres)
United States	2,214,420	1,007,363	455
New England	28,550	4,843	170
New York	42,000	8,700	207
New Jersey	8,200	900	110
Pennsylvania	56,500	8,500	150
South Atlantic	279,700	58,640	210

Source: (5)

In 1986, New Jersey had 8,200 farms. The average size of a farm in New Jersey was 110 acres, which is small compared to those in New York or Pennsylvania.

Over time, the number of farms in New Jersey, as well as in the rest of the United States, has declined. However, the number of farms declined faster than their acreage, thus resulting in an increase of the average number of acres per farm. Information on this evolution is provided in Table 4.2.

Table 4.2 shows the number of farms in New Jersey and in the United States since 1950. The decline in the number of farms in N.J. during the 1950-1965 period was much more rapid than during the years 1965-1986. A similar trend can be observed in the United States.

The farmland area in New Jersey also declined rapidly, but more so in the 1950-1965 period than in later years. In the U.S. the shrinkage of farmland was much less pronounced than in N.J. over the entire period. As a result of these changes, the average size of a farm in New Jersey increased from 66 acres in 1950 to 110 acres in 1986. The average size of farms in the United States has always been higher than in the Garden State, reflecting the difference in the type of farming practiced in N.J. Moreover, the average size of farms in the U.S. grew faster than in the Garden State.

Table 4.2
Number of Farms and Land in Farms
New Jersey and the United States, 1950-1986

	Number of Farms		Farmland (thousand acres)		Average Size of Farms	
	N.J.	U.S.	N.J.	U.S.	N.J.	U.S.
1950	26,900	5,647,800	1,770	1,202,019	66	213
1955	21,600	4,653,800	1,650	1,201,900	76	258
1960	15,800	3,962,520	1,460	1,175,646	92	297
1965	11,000	3,356,170*	1,220	1,139,597	111	340
1970	8,600	2,949,000	1,060	1,102,371	123	374
1980*	9,400	2,432,510	1,020	1,038,885	109	427
1985*	8,700	2,274,730	940	1,014,383	108	446
1987	8,200	2,214,420	900	1,007,363	110	445

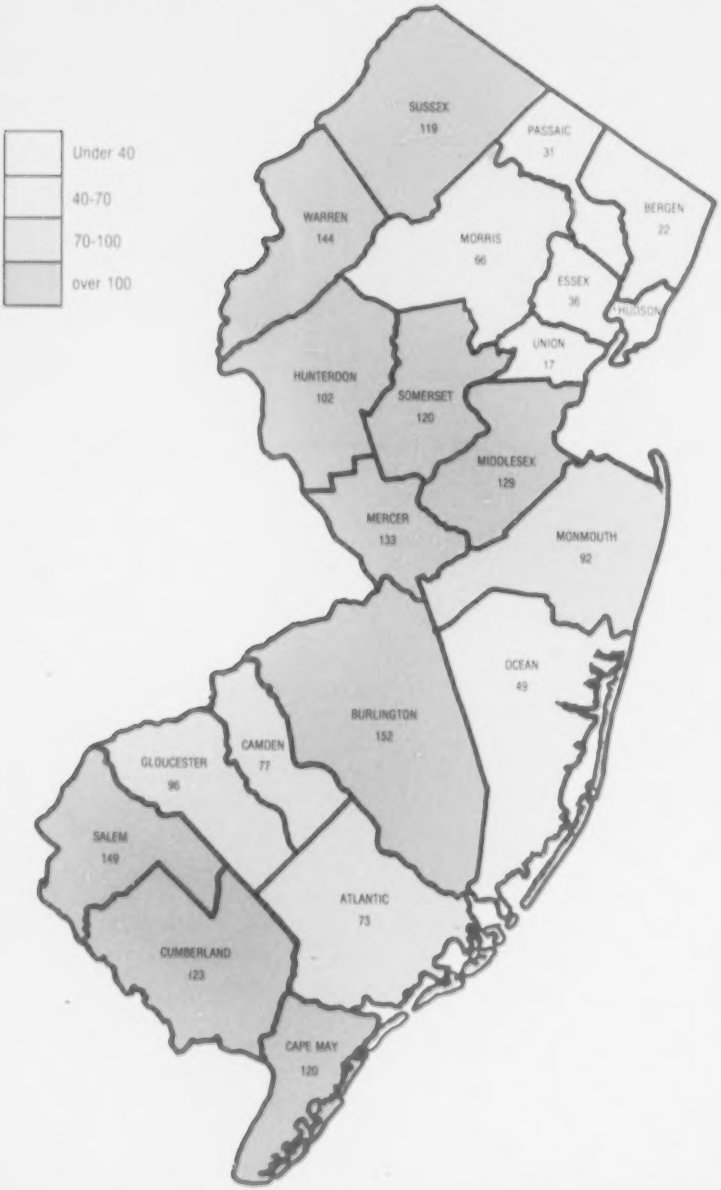
*Figures from New Definition: Places which had annual sales of agricultural products of $1,000 or more.

Old Definition: Places of ten or more acres that had annual sales of agriculture products of $50 or more and places of less than ten acres that had annual sales of $250 or more.

Source: (4)

The average size of farms differs across New Jersey counties. Figure 4.1 shows that the smallest average farm size was in Union County (16.5 acres) followed by Bergen, Passaic and Essex counties (21.7, 30.6 and 36.5 acres, respectively). The largest average size of farms was registered in Burlington, Salem and Warren counties with 151.7, 149.1 and 143.7 acres, respectively. Several other counties had an average size of farms that exceeded the statewide average. These are Mercer, Cape May, Cumberland, Middlesex, Somerset and Sussex counties.

FIGURE 4.1
AVERAGE SIZE OF NEW JERSEY FARMS IN 1982 (acres)



*Data for Hudson County are not available due to disclosure problem.

Source: (5)

Value of Farmland

Table 4.3 presents the average value per acre of farmland (including buildings) for 1981 and 1986 for selected states and an average of 48 states. New Jersey has the highest value of land among all 48 contiguous states. The Garden State also experienced a very rapid increase in the value of farmland during the 1981-1986 period. This high value of land is certainly related to the type of farms (fruit, vegetables and livestock) operated in New Jersey. In contrast, the average value of farmland in the 48 contiguous states declined by over 27 percent over the 1981-1986 period.

Table 4.3
Average Value Per Acre of Farmland and Buildings, 1981–1986
Selected States

	1981	1986	% Change
Massachusetts	$1,752	$2,752	57.1
Connecticut	2,517	3,721	47.8
New York	773	824	6.6
New Jersey	3,040	3,913	28.7
Pennsylvania	1,568	1,450	-7.5
48 States	819	595	-27.4

Source: (35)

New Jersey's landscape is extremely varied—from mainly urban centers in the Northeast to beautiful shores along the Atlantic Ocean, and very rural areas in the northwest and southwest. This diversification is well reflected in the percentage of land used for farming. About 1.0 percent to 1.5 percent of total land is used for farming in the northeastern counties of Hudson, Essex, Bergen and Union. On the other end, 30 percent to 45 percent of all land is farmed in Gloucester, Warren, Hunterdon and Salem counties (Figure 4.2).

Farm Employment

No precise count of employment in farms exists. It is estimated that approximately 20,000 people derive their income from work on N.J. farms. There is, probably, an additional number of farmworkers employed during the harvest season. Farm employment has substantially declined over the last several decades.

Crops

New Jersey farms cultivate several field crops such as corn, soybeans, hay, potatoes and wheat (Table 4.4). A much larger portion of Garden State farming is devoted to cultivating vegetables and fruits (Figure 4.3). Livestock and livestock products are also a significant part of farmers' business and income.

FIGURE 4.2
PERCENT OF LAND IN FARMS, 1982

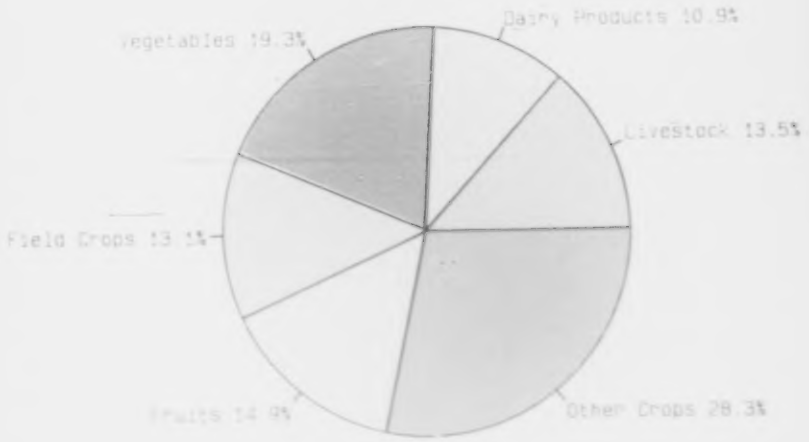
Source: (37)

Table 4.4
Cash Receipts from New Jersey Farm Marketings
1980-1985
(000)

	1980	1985*	% Change
All Livestock and Products	123,405	144,454	17.1
All Field Crops	77,566	77,138	−0.6
All Vegetables	87,556	114,241	30.5
All Fruits and Berries	60,177	87,974	46.2
All Commodities	431,334	591,483	37.1

*preliminary
Source: (3)

FIGURE 4.3
DISTRIBUTION OF CASH RECEIPTS FROM FARM PRODUCTS
1985, percent



Source: (3)

Livestock and Livestock Products

Gross Income from livestock and livestock products has increased in the last several years, but not uniformly (Table 4.5). The fastest growth was achieved from the marketing of turkeys, eggs and cattle. Income from

Table 4.5
Gross Income from Livestock and Livestock Products
1980-1985

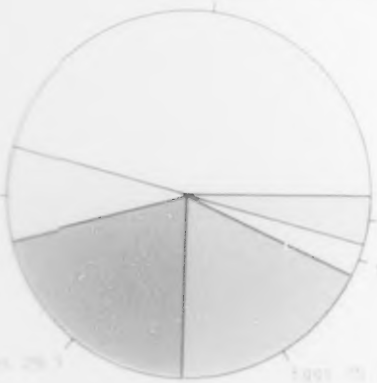
	Gross Income ($000)		Change 1980–1985 (%)
	1980	1985	
Cattle and Calves	$8,258	$13,574	64.4
Hogs and Pigs	6,323	6,761	6.9
Sheep and Lambs	281	431	53.4
Wool	44	32	−27.3
Milk	66,496	64,586	−2.9
Eggs	13,485	25,675	90.4
Chickens	545	638	17.1
Turkeys	957	1,751	83.0

Source: (3)

milk marketing declined somewhat, but remains the largest source of farm income from livestock products.

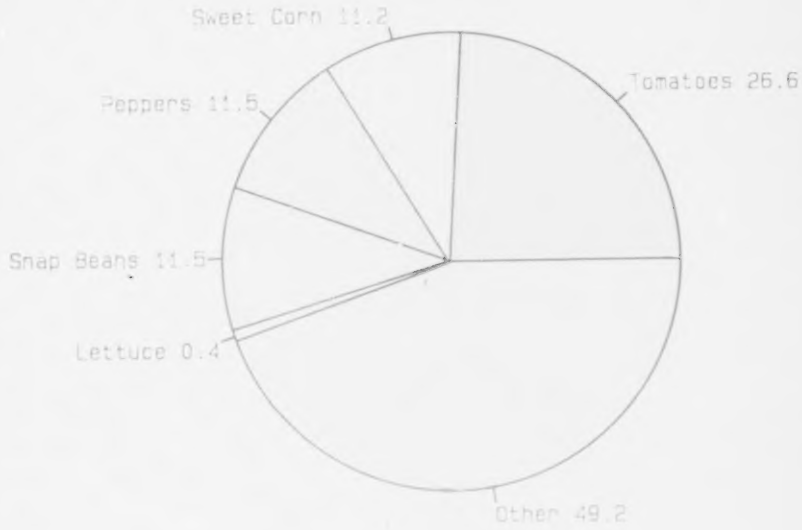
The distribution of incomes from livestock, vegetables and fruits are illustrated by Figures 4.4, 4.5 and 4.6

FIGURE 4.4
DISTRIBUTION OF INCOME FROM LIVESTOCK AND LIVESTOCK PRODUCTS
1985, in mill.$



Source: (3)

FIGURE 4.5
DISTRIBUTION OF INCOME FROM VEGETABLES
1985, in mill.$



Source: (3)

FIGURE 4.6
DISTRIBUTION OF INCOME FROM FRUITS
1985, in mill.$

Source: (3)

Balance Sheet of Farming Sector

A total financial characteristic of the New Jersey agricultural sector is provided in the following balance sheet (Table 4.6).

Table 4.6
Balance Sheet of the Farming Sector (including farm households)
1980-1985
($ million)

	1980	1985	% Change
Assets:			
TOTAL	4,030.7	4,793.9	18.9
Real Estate	3,331.2	3,717.4	18.7
Machinery & Motor Vehicles	350.2	326.5	−6.8
Household Equipment & Furnishings	156.2	333.2	113.3
Other Assets	393.1	416.8	6.0
Liabilities:			
Total Farm Debt	456.5	459.4	0.6
Equity	3,574.3	4,334.5	21.3
Net Farm Income Debt (%)	20.2	54.5	169.8

Source: (3)

2. NATURAL RESOURCES

Fishing

Fishing stands out as a major natural resource industry in N.J. With 130 miles of seacoast, New Jersey has one of the highest ratios of seacoast to total land area in the country (Table 4.7). In addition, inland water resources make up 4.3 percent of New Jersey's total land area, well above the national figure of 2.2 percent. Both the seacoast and the water area are extremely important natural resources for agriculture, fresh water use, tourism, industry and commerce.

Commercial Fishing Catch

New Jersey's 1985 fishing catch of 108 million pounds was little more than that in 1980 in terms of weight. The value of the fishing catch reached $61 million, an increase of 22 percent over the 1980 value, compared to a

Table 4.7
Land Area and Coastline
United States and Selected States

	Total Land Area (square miles)	General Coastline (miles)	Water Area (square miles)	Ratio Seacoast to Land Area
United States	3,539,289	12,383	79,481	0.0035
Maine	30,995	228	2,270	0.0074
Massachusetts	7,824	192	460	0.0245
New York	47,377	127	1,731	0.0027
New Jersey	7,468	130	319	0.0174
Delaware	1,932	28	112	0.0145
Maryland	9,837	31	623	0.0032

Source: (48)

29 percent increase in the Consumer Price Index during the same period. The N.J. commercial fishing industry outperformed the national fishing industry's results. New Jersey did better than New York and Maryland, but lagged behind the New England region (Table 4.8).

Total weight and value of the fish catch in the United States has remained relatively constant during the 1980-85 period. In New Jersey, however, along with the decline in weight, the value of the fishing catch has increased, roughly in line with the overall inflation rate. The various fish catches during 1985 and 1986 are shown in Table 4.9. There is a considerable variation in the kind and prices of fish caught in particular years.

Table 4.8
Commercial Fishing Catch
New Jersey and Neighboring States*
1980 and 1985

	1980		1985	
	Catch (million lbs.)	Value ($ million)	Catch (million lbs.)	Value ($ million)
United States	6,482	$2,237	6,258	$2,326
New England	788	527	580	419
New York	39	45	39	38
New Jersey	201	80	108	61
Maryland	80	45	92	47

*Comparable statistics are not available for Pennsylvania.
Source: (14)

Table 4.9
New Jersey Fishing Catch
1985 and 1986

	Catch (lbs.)		Dock Value ($)	
	1985	1986	1985	1986
Surf Clams	33,155,899	36,253,035	$18,324,990	$20,764,873
Sea Scallops	1,754,167	2,142,791	8,112,416	9,497,515
Ocean Quahogs	28,834,190	24,072,410	8,693,648	7,222,440
Fluke	5,633,812	4,017,068	4,961,000	4,649,627
Hard Clams	1,034,780	1,156,890	3,219,215	3,811,710
Lobster	1,079,723	1,123,008	2,983,746	3,446,179
Swordfish	495,106	742,496	1,351,248	2,222,026
Tunas	444,589	787,187	902,284	1,974,354
Scup (Porgies)	3,290,819	4,146,342	1,389,877	1,802,004
Tilefish	1,712,831	1,514,605	1,930,273	1,686,870
Whiting	8,988,263	5,899,707	1,419,439	1,340,653
Blue Crabs	2,407,268	2,682,232	1,120,770	1,298,003
Squids	3,297,721	5,313,401	757,103	1,082,582
Weakfish	3,029,696	3,208,062	1,349,588	1,073,821
Black Sea Bass	642,197	798,154	522,041	575,779
Oysters	293,192	104,782	1,065,012	515,083
Bluefish	1,988,653	2,897,702	308,650	487,837
Mackeral	1,858,267	4,740,596	147,781	394,956
Butterfish	1,450,452	799,452	419,866	364,488
Eels, Common	337,896	294,418	226,357	254,720

Source: (14)

The fishing processing and distributing industry in New Jersey is compared with the other Mid-Atlantic states in Table 4.10.

Table 4.10
Fishing Industry Plants
Middle Atlantic Region
1983

	Processing		Wholesale	
	Plants	Employment	Plants	Employment
New York	43	618	169	1,479
New Jersey	31	1,083	68	326
Pennsylvania	13	905	16	302

Source: (62)

Forests

Approximately 40 percent of N.J. land is covered with forests, despite the State's position as a densely-populated, major industrial state. N.J.'s share of forest land in total land area is significantly greater than the U.S. average (32.4%). New York and Pennsylvania have comparatively greater proportions of forest land, with 56 and 58 percent, respectively (Table 4.11).

Table 4.11
Land Devoted to Forests
United States and Middle Atlantic States, 1977*

	Total Surface Area (000 acres)	Forest Land (000 acres)	Percent Forest Land
United States	2,271,343	736,558	32.43
New York	30,681	17,218	56.12
New Jersey	4,813	1,928	40.06
Pennsylvania	28,804	16,826	58.42

*Latest available statistics
Source: (48)

The Timber Industry

Of New Jersey's almost two million acres of forest land, 96 percent is commercial timberland. This is substantially above the proportion for the United States and other Mid-Atlantic states (Table 4.12). Privately-owned timberlands account for 83 percent of the State's commercial timberlands. In 1977, N.J.'s timber industry produced 3,127 million board feet of saw timber, a yield of 1,684 board feet per acre. The State's yield per acre is lower than the national yield of 5,345 board feet per acre and those of neighboring states (1,832 in New York and 2,151 in Pennsylvania).

Table 4.12
Commercial Forestland
United States and Mid-Atlantic States, 1977

	Forestland (000 acres)			
	Total	Commercial Timberland Total	Privately Owned	Saw Timber Net Volume Total (million board feet)
United States	736,558	482,389	346,764	2,578,940
New York	17,218	14,243	13,351	26,088
New Jersey	1,928	1,857	1,536	3,127
Pennsylvania	16,826	15,925	12,453	34,251

Source: (48)

Forestland Preservation

Woodland is important, not only for its value as timber, but also for its ability to control water runoff. Forestland and other natural areas are also desirable for their beauty and recreational potential. Recognizing the importance of its land resources, the state government has endeavored to preserve certain areas of the State through purchase and regulation. The Coastal Area Facilities Review Act (CAFRA) of 1973 regulates more than 1,700 square miles of N.J.'s coastal areas. Residential and industrial developments are subjected to intense state government review in the coastal zone, and projects deemed hazardous to the shore environment are rejected. In 1980, a plan was also developed to preserve and protect over 1,500 square miles in the ecologically sensitive Pine Barrens of South Jersey (Figure 4.7).

FIGURE 4.7
NEW JERSEY PINELANDS PRESERVATION
AND PROTECTION AREA

Source: (32)

Parks and Recreation Areas

In 1985, New Jersey's 296,000 acres of state parks and recreation areas were visited by over eight and one-half million people (Table 4.13).

New Jersey's state forests, parks and recreational areas account for over six percent of the State's land, well above the national average of 2.8 percent.

Table 4.13
State Parks and Recreation Areas, 1985
United States and Mid-Atlantic Region

	Acreage (000)	Visitors (000)
United States	10,128	661,916
New York	256	34,161
New Jersey	296	8,533
Pennsylvania	282	37,835

Source: (48)

Minerals

In 1984, New Jersey's mining industry extracted minerals valued at $156 million, up 4.7 percent from 1980 (Table 4.14). The producer price index for non-metallic minerals rose by over 150 percent during the same time period. This reflects a significant decline in the quantity extracted.

Table 4.14 also shows that N.J.'s increase in minerals production (by 4.7%) was in line with Pennsylvania's, but far behind the increases in New York State and the United States. The quantities of various categories of minerals extracted in 1980 and 1984 are listed in Table 4.15. A significant decline in extraction was recorded for peat and zinc.

Table 4.14
Mineral Production
United States and Region, 1980 and 1984

	Value ($ million)		
	1980	1984	Percent Increase
United States	$147,023	$179,179	21.87
New England	268	305	13.80
New York	1,019	1,141	12.14
New Jersey	149	156	4.70
Pennsylvania	3,756	3,934	5.30

Source: (48)

Table 4.15
New Jersey's Mineral Production
1980 and 1984

	Quantity (000 short tons)	
Minerals	1980	1984
Clays	63	62
Peat	20	5
Sand and Gravel	8,596	9,545
Crushed Stone	11,830	13,500
Zinc	28,859	13,500

Source: (15)

As Figure 4.8 shows, mineral resources are spread throughout New Jersey. The high quality sand and gravel beds of southern New Jersey, especially in Cumberland County, have been a major factor for location of the glass industry. Cumberland County also contributes significantly to the State's clay production, as do Middlesex and Somerset counties. Cape May extracts magnesium from seawater. Stone is mostly found in the quarries of Somerset and Mercer counties.

FIGURE 4.8
NEW JERSEY MINERAL DISTRIBUTION

Source: [15]

V

CONSTRUCTION AND MANUFACTURING

V

CONSTRUCTION AND MANUFACTURING

Three sectors comprise the industrial part of New Jersey's economy: mining, construction and manufacturing. Mining is a very small sector (about 2000 employees) and is left out from consideration here. Construction and manufacturing employ approximately 850,000 people, or about one-quarter of all nonfarm payroll employment in the State.

Manufacturing has traditionally been a leading sector in the New Jersey economy. An important participant in the early years of industrial development in the United States, New Jersey created a highly diversified manufacturing sector, and many new products and technological advances originated in the State. In recent years, however, the decline in manufacturing employment has been a source of concern to policy makers. This Chapter focuses on the contribution of the manufacturing and construction sector to the State's economy in recent years. It highlights new developments and compares them with national trends and with those of neighboring states.

1. CONSTRUCTION

Construction Establishments and Receipts

According to the latest census of the construction industries, New Jersey had 36,800 construction establishments in 1982 and their receipts surpassed $10 billion. The number of companies with payrolls reached 15.5 thousand. Their total receipts were $8,941 million and they employed 121.5 thousand workers. Since 1982, employment in construction companies increased considerably.

Among the regions and states compared in Table 5.1, New Jersey construction companies achieved the highest average receipt per employee—admittedly a crude measure of labor productivity.

Construction Contracts

The value of construction contracts awarded in New Jersey has fluctuated considerably over the past decade. Since 1976, the average value of contracts awarded has ranged from $3.5 billion in 1981 to nearly $9.0 billion in 1987 reflecting the remarkably rapid growth this sector has experienced since the end of the 1980-82 recession (Figure 5.1). In each of the last three years (1985-1987) total contracts awarded surpassed the $8 billion mark and residential contracts exceeded $4 billion each year.

Table 5.1
Construction Establishments, Employees and Receipts by Regions and States, 1982

	All Establishments		Establishments with Payrolls			
	Number (000)	Receipts ($ million)	Number (000)	Employees (000)	Receipts	Receipts Per Employee
United States	1,389.3	365,421	456.7	4,275	324,512	75,909
New England	80.8	18,018	28.1	223	15,584	69,883
New York	67.9	19,789	26.5	246	18,037	73,321
New Jersey	36.8	10,278	15.5	121	8,941	73,892
Pennsylvania	60.3	15,701	20.6	194	14,152	72,926
South Atlantic	222.9	62,584	82.0	834	45,925	67,247

Source: (38)

FIGURE 5.1
CONSTRUCTION CONTRACTS AWARDED, NEW JERSEY, 1970–1983
(millions of current dollars)

Source: (22)

Housing Activity

Housing stock in New Jersey rose 19.5 percent between 1960 and 1970, while from 1970 to 1980 it had risen only 16.1 percent. New Jersey's growth of housing stock was higher than in the United States between 1960 and 1970, but had a much lower rate from 1970 to 1980 (Table 5.2). Both New York and New Jersey had less growth in housing stock during the seventies than in the sixties; while the United States had higher rates of growth.

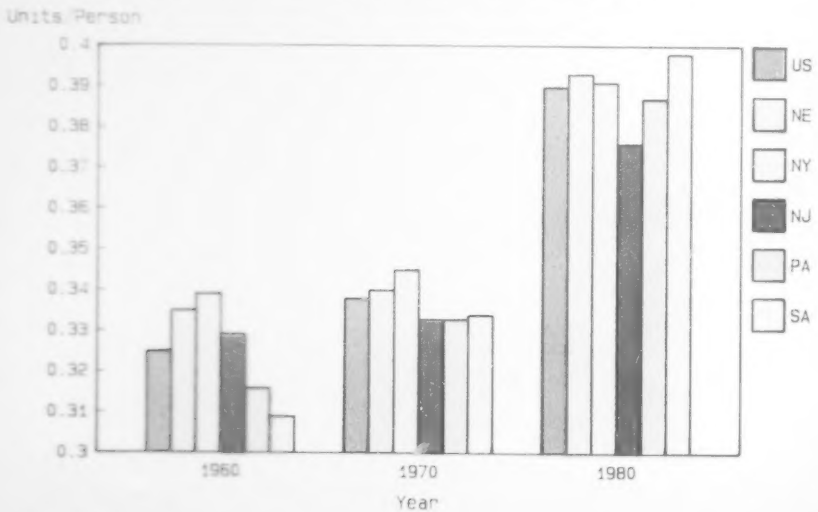
Table 5.2
Total Housing Stock

	Number of Units (000)			Growth (%)	
	1960	1970	1980	1960–70	1970–80
United States	58,326	68,679	88,411	17.8	28.7
New England	3,522	4,031	4,850	14.5	20.3
New York	5,696	6,299	6,868	10.6	9.0
New Jersey	1,999	2,388	2,772	19.5	16.1
Pennsylvania	3,582	3,925	4,596	9.6	17.1
South Atlantic	8,033	10,252	14,692	27.6	43.3

Source: (47)

More revealing are comparisons of per capita housing stocks. This measure of shelter availability is depicted in Figure 5.2. During the 1970s, housing stock per capita increased dramatically in the United States and various regions and states. The Garden State, however, did not keep pace with the rest of the nation. In 1960, per capita housing stock in New Jersey was 0.33 units per person, or in other words, three people were living in one unit (a house or apartment). This was better than in the South Atlantic region, Pennsylvania and the average U.S. By 1980, the New Jersey indicator reached 0.376 units per person, which was lower than the average in the U.S., New England, South Atlantic and the Mid-Atlantic region.

FIGURE 5.2
PER CAPITA HOUSING STOCK, 1960–1980 units per person



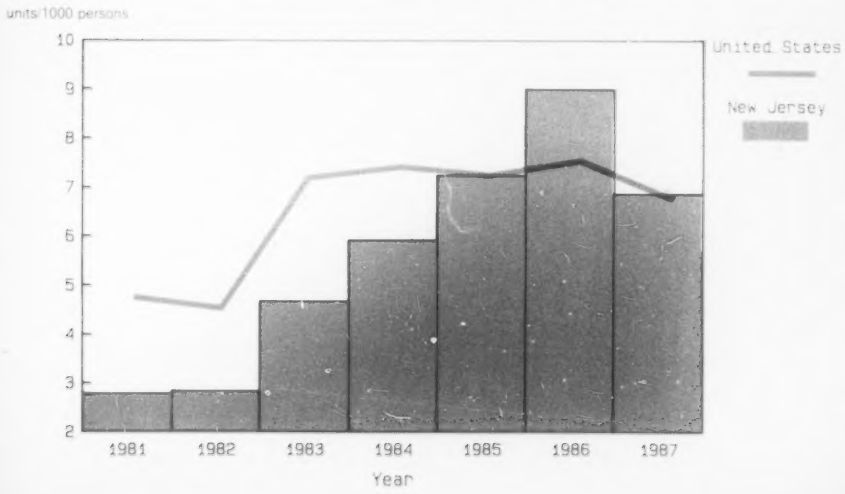
Source: (47)

Since 1980, housing construction per capita has grown at a much faster rate, but from a lower base, in New Jersey than in the nation as a whole. This may have improved the State's per capita housing stock but did not bring it any closer to the national average, because the State's total per capita housing starts during this period fell short of the national figure.

Between 1970 and 1980, growth of housing varied from county to county. The largest increase appeared in southern New Jersey—in Ocean, Burlington, Cape May and Gloucester counties and in the western counties of Sussex and Hunterdon (Table 5.3). Above average growth (over 16.1%) was also recorded in Atlantic, Camden, Cumberland, Middlesex, Monmouth, Morris, Salem, Somerset and Warren counties. Bergen, Essex, Hudson, Passaic and Union counties registered significantly below the statewide rate of housing stock growth throughout the 1970s.

Growth of per capita housing stock was uneven during the 1970s (Figure 5.4). The fastest growth occurred in the southwest counties of Burlington, Camden and Gloucester and the central counties of Somerset, Middlesex, Mercer, Monmouth and Union. Bergen County also gained considerably in per capita housing stock. In three counties, namely Sussex, Ocean and Cape

FIGURE 5.3
HOUSING STARTS PER CAPITA, 1981–1987
United States and New Jersey



Source: (47)

Table 5.3
New Jersey Housing Stock by County
1970 and 1980

	Number of Units		Percent Change 1970–1980
	1970	1980	
State Total	2,387,915	2,772,149	16.1
Atlantic	73,848	89,342	21.0
Bergen	283,666	306,774	8.1
Burlington	88,157	121,231	37.5
Camden	143,244	173,653	21.2
Cape May	53,152	72,107	35.7
Cumberland	40,005	47,345	18.4
Essex	311,615	317,230	1.8
Gloucester	51,708	69,113	33.7
Hudson	214,749	221,276	3.0
Hunterdon	22,267	30,029	34.9
Mercer	96,430	111,610	15.7
Middlesex	171,709	203,418	18.5
Monmouth	149,920	185,770	23.9
Morris	116,007	137,992	19.0
Ocean	110,311	173,532	57.3
Passaic	152,764	159,585	4.5
Salem	19,598	24,165	23.3
Somerset	58,598	69,774	19.7
Sussex	31,218	43,869	40.5
Union	174,328	182,835	4.9
Warren	24,907	31,499	26.5

Source: (2)

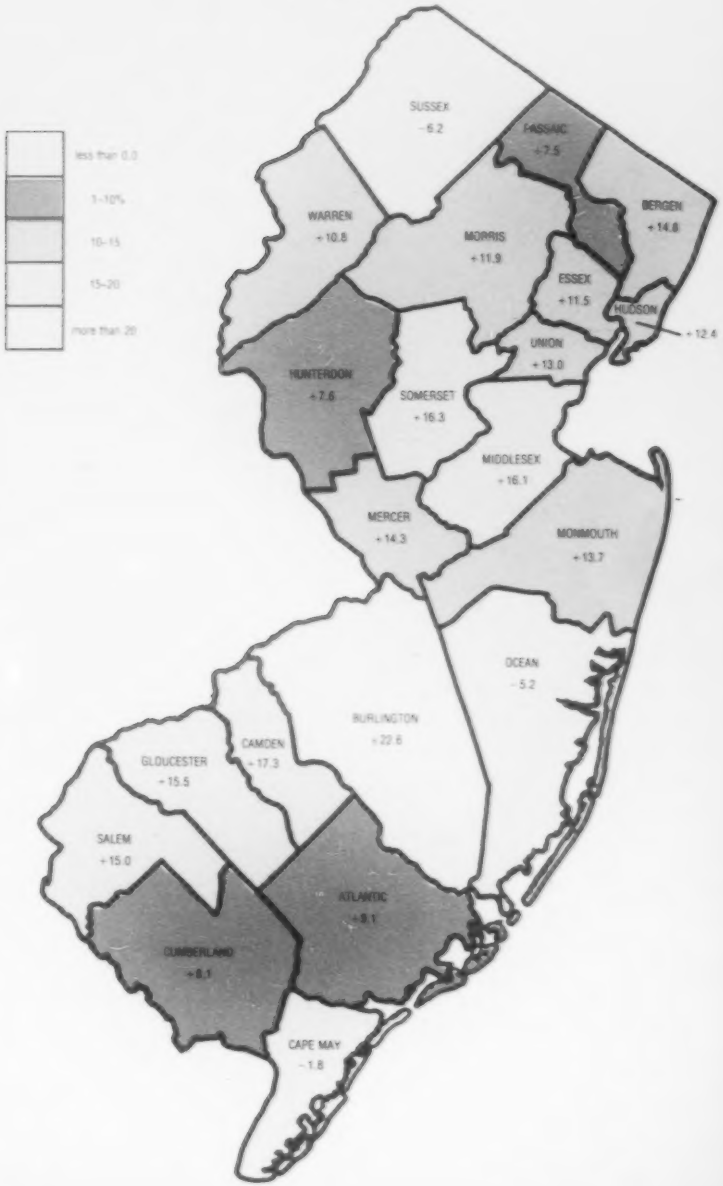
May, the number of housing units per capita actually declined during the 1970s because their population growth exceeded their fast-growing housing stocks.

The distribution of per capita housing stock by counties in 1980 is shown in Figure 5.5. The highest level was recorded in Cape May County (0.877 units per person). But this is due to the large share of resort units that are rented during the tourist season. To some degree this is also the case in Ocean and Atlantic counties. In the remaining counties, the per capita number of housing units does not deviate significantly from the statewide average.

It is interesting to notice how the total number of 1980 housing stock is distributed by counties. This is shown in Figure 5.6. The largest shares of housing stock are concentrated in Essex, Bergen and Hudson counties (over 7.5% of the total housing stock in each of those counties). The smallest percentages of the State's housing stock are located in Salem (0.87%), Hunterdon (1.08%), Warren (1.13%) and Sussex (1.58%) counties.

Since 1980, the distribution of housing stock by counties has changed somewhat because construction of new housing during the 1980s was less intensive in the most densely populated counties of the northeastern part of

FIGURE 5.4
GROWTH OF PER CAPITA HOUSING STOCK
1970–1980 (percent)

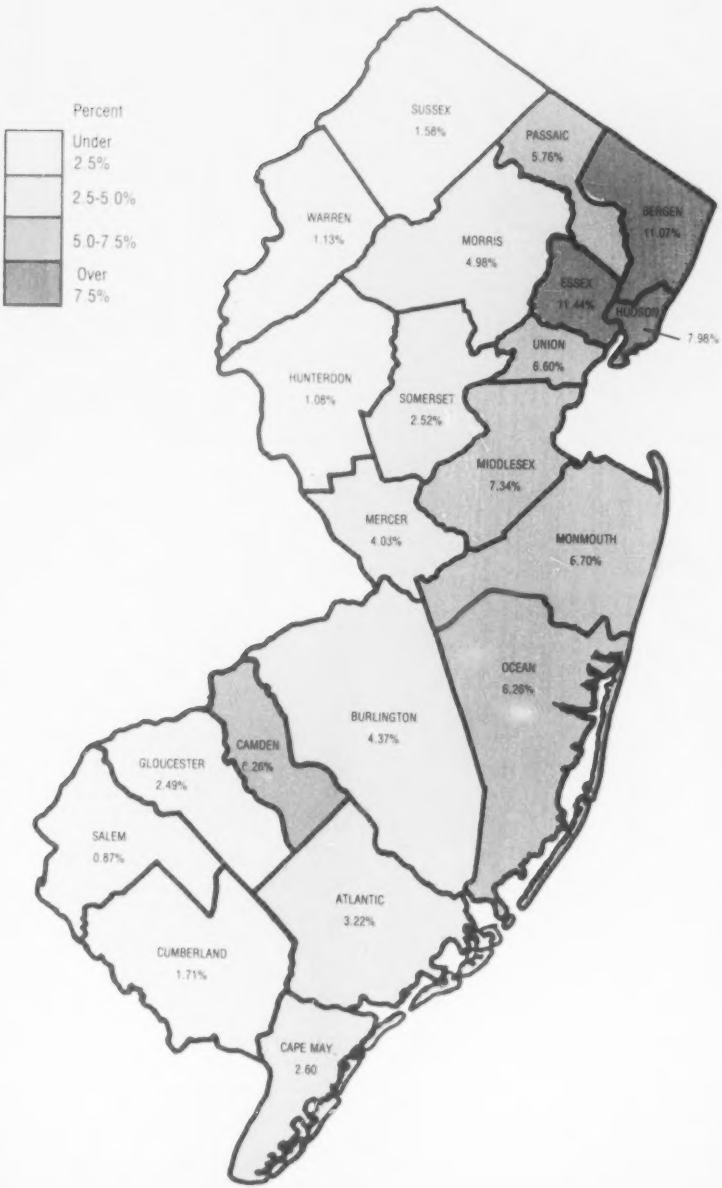


Source: (47)

FIGURE 5.5
NEW JERSEY HOUSING STOCK INCREASE
By County, 1970–1980

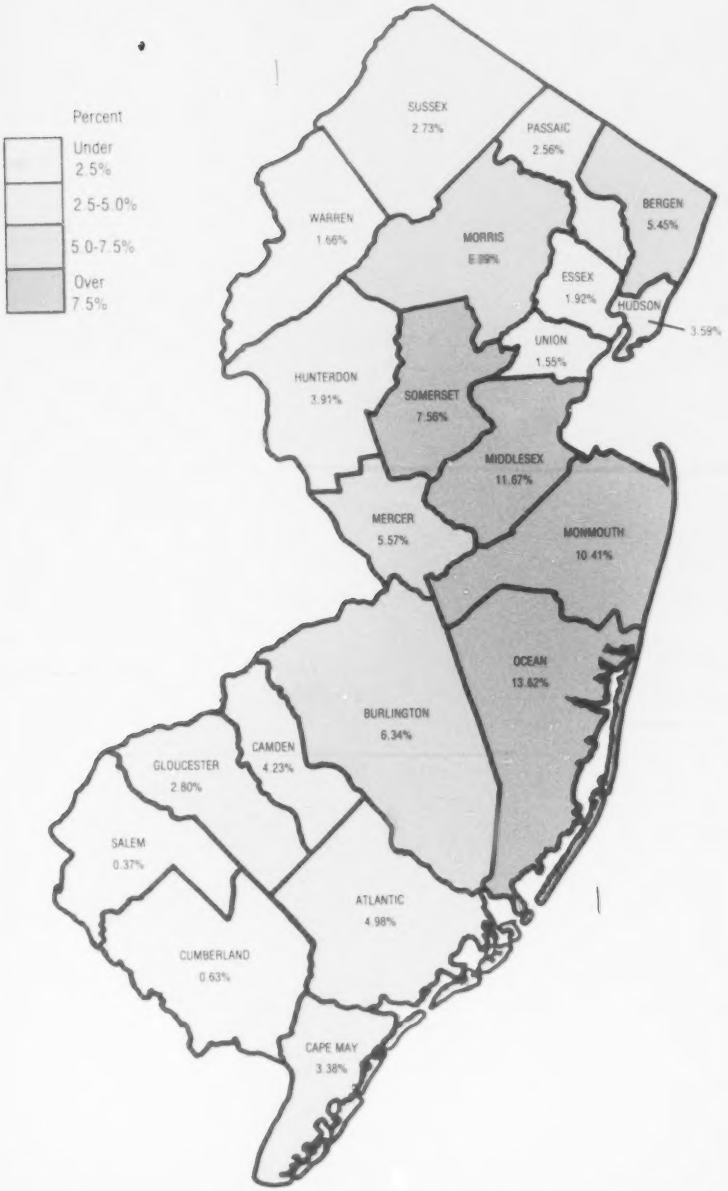
Source: (47)

FIGURE 5.6
SHARE OF NEW JERSEY HOUSING STOCK
By County, 1980



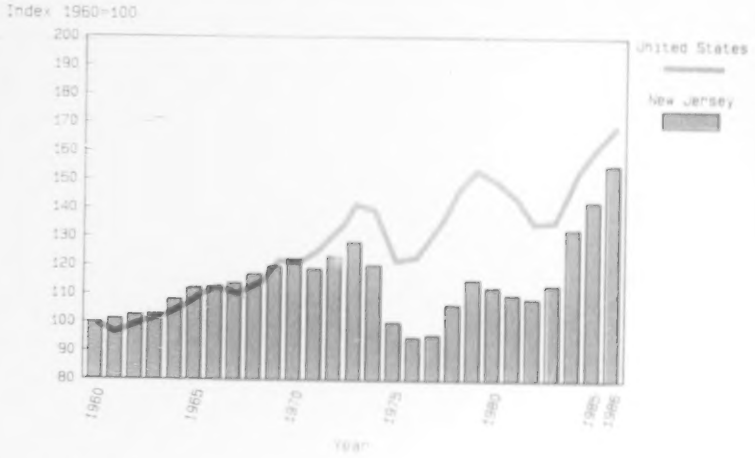
Source: (47)

FIGURE 5.7
SHARE OF HOUSING PERMITS BY COUNTY, 1985–1986



Source: (26)

FIGURE 5.8
EMPLOYMENT IN CONSTRUCTION, 1960–1986
United States and New Jersey



Sources: (22) and (55)

Table 5.4
Insured* Unemployment and Unemployment Rate in Construction
1970-1986

Year	Unemployed	Rate (%)	Year	Unemployed	
1970	9,400	7.2	1979	11,100	8.9
1971	13,000	10.0	1980	13,900	11.1
1972	12,900	9.6	1981	12,400	10.2
1973	12,000	8.6	1982	14,000	11.5
1974	18,400	13.4	1983	11,800	9.5
1975	21,200	17.6	1984	8,700	6.2
1976	17,000	15.3	1985	9,100	6.1
1977	14,000	12.9	1986	9,700	5.9
1978	11,200	9.6			

*Covered by unemployment insurance.
Source: (22)

the State (Passaic, Bergen, Essex, Hudson and Union Counties). In all other counties, except Salem, Cumberland and Camden, the share of new housing permits (which approximates new housing construction) was higher than the share of existing housing in 1980 (Figure 5.7). It is probable that for these counties, the current share of housing stock increased.

Construction Employment and Unemployment

Between 1960 and 1970 New Jersey's construction employment rose every year, except for a slight decline in 1963, while employment growth between 1970 and 1982 suffered many short-term fluctuations and an overall loss (Figure 5.8). Since 1983, however, New Jersey has enjoyed a rapid rise in construction employment with an average annual growth rate of 9.4 percent, far exceeding the United States growth rate of 5.9 percent.

The number of unemployed construction employees varied considerably over the years (Table 5.4). It reflects the ups and downs in the national business cycle. In addition, as shown in Figure 5.8, New Jersey's construction employment in the 1970s was very weak. This is reflected in the considerably high insured unemployment numbers almost throughout the entire decade of the 1970s. The current figure, around 9,000, is the lowest since 1970 and the insured unemployment rate in 1986 was only 5.9 percent.

2. MANUFACTURING

New Jersey's manufacturing sector underwent major changes during the last several decades. Once a dominant sector of the State's economy, the role of manufacturing has been steadily declining. This trend is also visible in the nation's economy, especially when employment is considered. Output of manufacturing industries has not been declining so precipitously, however.

By 1985, New Jersey's share of manufacturing output (measured in terms of value added) was 3.61 percent compared with 3.9 percent in 1980. In terms of employment, the Garden State's share was 3.78 percent in 1985, down from 3.94 percent in 1980 (Table 5.5).

The output and employment shares of the other Middle-Atlantic states in the U.S. total also declined during the 1980-85 period. On the other hand, the shares of New England and South Atlantic increased during those years.

Table 5.6 shows the overall productivity level, defined as the value of output (value added) divided by the total number of employees.

Labor productivity is influenced by, among others, the industry composition within the manufacturing sector because each individual manufacturing industry can exhibit different levels of labor productivity. Some industries such as, for example, Chemicals or Automobiles, have higher value

Table 5.5
Value Added and Employment in Manufacturing, 1980-1985
Regions and States

	1980				1985			
	Value Added ($ million)	Share in Total U.S. (%)	Employment (000)	Share in Total U.S. (%)	Value Added ($ million)	Share in Total U.S. (%)	Employment (000)	Share in Total U.S. (%)
United States	773,441	100.00	20,644	100.00	999,328	100.00	18,788	100.00
New England	51,632	6.68	1,558	7.55	69,342	6.94	1,429	7.61
New York	58,140	7.52	1,547	7.49	73,393	7.34	1,305	6.95
New Jersey	30,137	3.90	814	3.94	36,117	3.61	711	3.78
Pennsylvania	47,048	6.08	1,340	6.49	51,858	5.19	1,086	5.78
South Atlantic	100,367	12.98	3,060	14.82	14,809	14.59	2,983	15.88

Source: (44)

added/employee ratios than, for instance, the Textile and Apparel industries. If a state has a larger share of high productivity industries, its overall indicator will be relatively higher than in states with a larger share of low productivity industries.

Table 5.6 also shows that New York state had the highest level of value added per employee, while Pennsylvania—the lowest. New Jersey was close to the national average in 1980, but slipped somewhat in 1985. New England and the South Atlantic regions, although exhibiting relatively low levels of labor productivity, nevertheless, experienced some increases since 1980.

Table 5.7 presents the composition of major industries in the manufacturing sectors of the United States and New Jersey.

In terms of output (value added), Chemicals are New Jersey's leading industry (26.1%), followed by the Food (10.8%) and Electric and Electronic Equipment (10.2). In the United States, the Chemical industry's share of total output is only 10.0 percent. The share of Transportation Equipment in the nation's manufacturing sector is 12.7 percent, while in New Jersey it is only 3.8 percent. Lower shares in New Jersey are also in the Nonelectrical Machinery industry (6.8% in N.J. vs. 11.6% in the U.S.), Electrical Machinery (10.2% vs. 11.65), and Primary Metals (2.8% vs. 4.0%).

The shares of employment by major industries show similar differences between the Garden State and the United States in Chemicals, Transportation Equipment and Machinery. The large difference in the last row of Table 5.7 is due largely to the inclusion of auxiliary employment — headquarter's employees who could not be distributed by industry.

Labor Productivity by Major Industries

Table 5.8 compares labor productivity or output (value added) per employee of New Jersey's major industries with those of the United States for 1985.

Table 5.6
Labor Productivity in Manufacturing

	1980		1985	
	Value Added/ Employee	Ratio to U.S.	Value Added/ Employee	Ratio to U.S.
United States	37,465	1.00	53,190	1.00
New England	33,139	0.88	48,525	0.91
New York	37,582	1.00	56,240	1.06
New Jersey	37,023	0.99	50,797	0.96
Pennsylvania	35,108	0.94	47,751	0.90
South Atlantic	32,799	0.88	48,880	0.92

Source: (42)

Table 5.7
Share of Major Industries in Total Manufacturing, 1985

Industry	Percent of Value Added		Percent of Total Employment	
	United States	New Jersey	United States	New Jersey
Food & Kindred Prod.	11.0	10.8	7.6	5.7
Textile Mill Prod.	2.2	1.3	3.5	1.9
Apparel & Other Textile Prod.	2.9	3.4	5.6	6.6
Furniture & Fixtures	1.7	1.0	2.5	1.5
Paper & Allied Prod.	4.3	3.8	3.2	3.7
Printing & Publishing	7.7	8.5	7.3	7.8
Chemicals & Allied Prod.	10.0	26.1	4.4	11.8
Rubber & Plastic Prod.	3.8	4.0	4.0	5.0
Leather & Leather Prod.	0.4	0.5	0.8	0.6
Stone, Clay & Glass Prod.	3.0	3.6	2.8	3.3
Primary Metals	4.0	2.8	3.9	2.8
Fabricated Metals	7.3	6.4	7.8	7.1
Machinery, Except Electrical	11.6	6.8	10.6	7.1
Electric & Electronic Equip.	11.6	10.2	10.7	10.8
Transportation Equipment	12.7	3.8	9.4	2.0
Instruments & Related Prod.	4.2	5.1	3.2	3.3
All Other & Auxiliary	1.5	2.0	12.8	19.2

Source: (42)

Out of the seventeen listed major manufacturing industries, New Jersey showed higher labor productivity in six industries (Food, Textiles, Printing, Leather, Transportation Equipment, and Instruments). In the remaining eleven industries, the State lagged behind the national level of labor productivity. Some of these differences could be explained by varying assortments of goods produced in those major industries. Table 5.8 clearly shows the variation of labor productivity levels of major industries in the U.S. Similar variations could be present in the more detailed industries under each category shown here. Nevertheless, when a state has a disproportionate representation of high productivity industries and reflected in the overall productivity level, it should be considered a positive factor.

Labor productivity is also influenced by the quality and quantity of equipment put at the employee's disposal in the working process. The high level of labor productivity in the Chemicals industry, for example, is closely related to the high value of equipment per employee. While no suitable data exist to directly measure the capital/labor ratios, the impact of capital can be judged by the dollar value of new investment per employee. Table 5.9,

Table 5.8
Labor Productivity in 1985, United States and New Jersey by Major Manufacturing Industries

	Value Added/Employee		
	United States	New Jersey	U.S./N.J. Ratio
Food & Kindred Products	$73,213	$96,081	0.76
Textile Mill Products	31,430	36,421	0.86
Apparel & Other Textile Products	26,179	26,081	1.00
Furniture & Fixtures	34,891	33,459	1.04
Paper & Allied Products	66,855	52,141	1.28
Printing & Publishing	53,724	55,379	0.97
Chemicals & Allied Products	115,296	112,193	1.03
Rubber & Plastics Products	48,092	40,940	1.17
Leather & Leather Products	27,999	39,780	0.70
Stone, Clay & Glass Products	55,518	54,654	1.02
Primary Metals	51,323	50,747	1.01
Fabricated Metals	46,959	45,878	1.02
Machinery, Except Electrical	55,358	48,365	1.14
Electric & Electronic Equipment	54,736	48,181	1.14
Transportation Equipment	68,841	96,944	0.71
Instruments & Related Products	66,653	78,141	0.85
Miscellaneous Industries	42,779	41,243	1.04
TOTAL	53,167	50,811	1.05

Source: (42)

compares the relationships between new investment per unit of labor and per unit of output in the United States and New Jersey.

In three industries, New Jersey invests more per unit of labor than the national average. In these three industries (Food, Leather and Transportation Equipment), labor productivity is also higher in New Jersey.

In general, New Jersey industries are investing less per dollar of output or per employee. This may have future negative consequences for the preservation of the manufacturing industries in New Jersey. Lower investment leads to lessened competitiveness and, ultimately, to the decline of those industries and loss of jobs.

Employment and Unemployment

The percentage of total nonagricultural workers employed in manufacturing has declined for both the United States and New Jersey since the end of World War II (Figure 5.9). In 1950, New Jersey's manufactures employed 45.6 percent of the State's nonagricultural employees. The United States' share of manufacturing employment in 1950 was only 33.7 percent. Thus, New Jersey was heavily relying on manufacturing at that time. This

Table 5.9
New Investment Ratios, United States and New Jersey, 1985

	Cents per Dollar of Output (value added)			Dollars per Employee		
	U.S.	N.J.	U.S./N.J. Ratio	U.S.	N.J.	U.S./N.J. Ratio
Food & Kindred Products	6.77	9.43	0.72	$4,955	$9,062	0.55
Textile Mill Products	9.00	6.23	1.44	2,830	2,271	1.25
Apparel & Other Textile Prod.	2.51	2.27	1.11	658	591	1.11
Furniture & Fixtures	4.63	3.81	1.22	1,616	1,275	1.27
Paper & Allied Products	15.54	9.33	1.67	10,389	4,863	2.14
Printing & Publishing	6.45	5.39	1.20	3,468	2,985	1.16
Chemicals & Allied Products	8.68	6.43	1.35	10,008	7,211	1.39
Rubber & Plastics Products	9.60	10.17	0.94	4,619	4,165	1.11
Leather & Leather Products	2.52	2.33	1.08	705	927	0.76
Stone, Clay & Glass Prod.	9.64	6.76	1.43	5,352	3,692	1.45
Primary Metals	12.49	7.12	1.75	6,409	3,611	1.77
Fabricated Metals	6.28	5.64	1.11	2,951	2,588	1.14
Machinery, Except Electric	7.55	5.22	1.45	4,180	2,525	1.66
Electrical Equipment	9.53	7.23	1.32	5,217	3,485	1.50
Transportation Equipment	8.58	13.65	0.63	5,906	13,232	0.45
Instruments & Related Prod.	6.41	4.58	1.40	4,271	3,581	1.19
Miscellaneous Industries	4.75	4.67	1.02	2,033	1,927	1.06
Total	8.33	7.02	1.19	4,430	3,568	1.24

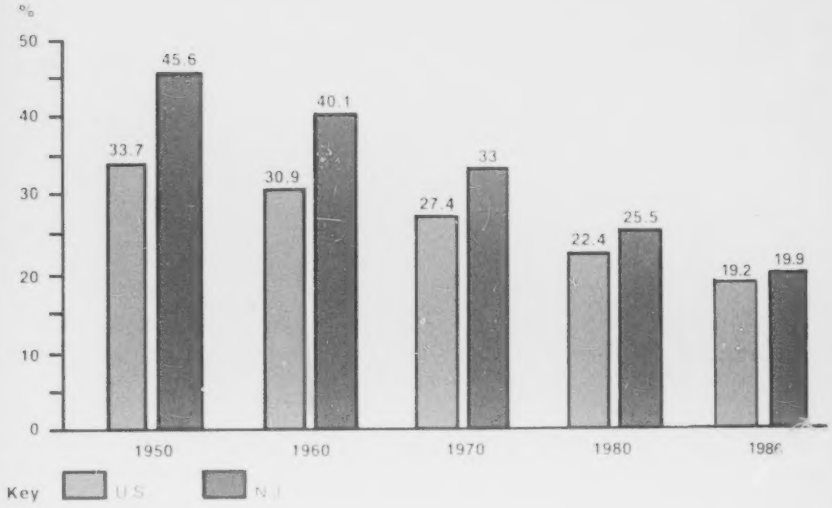
Source: (42)

percentage was steadily declining, and by 1986 it was 19.9 percent in the State and 19.2 percent in the United States. The State transformed its economy from a strong dependence on manufacturing to a service oriented one where almost 75 percent of its employees are active in providing all kinds of services.

The behavior of New Jersey's manufacturing employment is shown in Figure 5.10. Manufacturing employment reached its peak of 892,500 in 1969, then reversed the trend, falling to 693,000 in 1986. The average annual rate of growth was 1.1 percent between 1960 and 1969, and -1.5 percent from 1969 to 1986. For the United States, the average rate of growth for 1960-69 was 2.1 percent and -0.3 percent for 1969-86.

Year-to-year percentage changes in manufacturing employment for both the United States and New Jersey are exhibited in Figure 5.11. During the years of increased manufacturing employment, New Jersey's employment grew at a lower rate than the United States; while during those years in which employment decreased, New Jersey's rate of decline was, in many instances, more pronounced.

FIGURE 5.9
SHARE OF MANUFACTURING IN TOTAL EMPLOYMENT
(percent)



Sources: (22) and (55)

Exports

During 1984, New Jersey exported manufacturing goods valued at over $8 billion, which accounts for 10.3 percent of total shipment of manufactured goods ($77.745 billion). For the United States as a whole, this figure was 11.9 percent for 1984. Thus, the State did not participate in exports at a commensurate level to its total output.

A more detailed account of percentages of exports by major manufacturing industries is provided in Table 5.10.

In six industries, New Jersey achieved a higher percentage of exports than the United States. These industries are: Food, Textiles, Furniture, Printing, Leather, and Stone, Clay and Glass. Of particular interest is the Transportation Equipment industry where the difference is very large. This can partly be explained by the absence of the Aircraft industry in New Jersey which is heavily exported. Similarly, the State has a disproportionately smaller percentage of automobile factories. Chemicals and Electrical and

FIGURE 5.10
NEW JERSEY MANUFACTURING EMPLOYMENT
1960–1986, in thousands

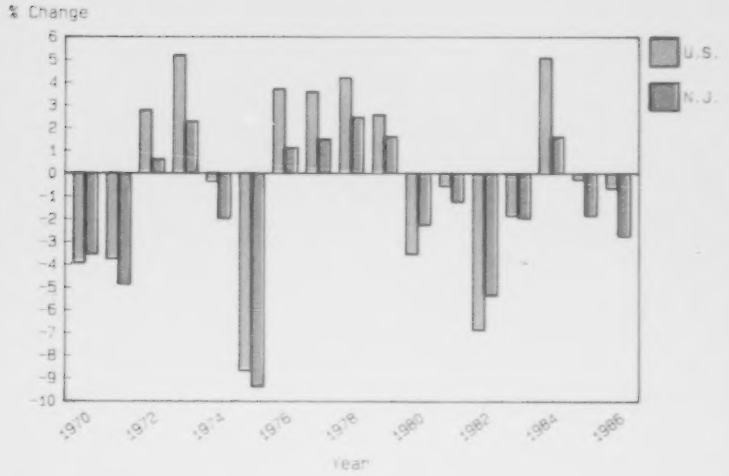
Source: (21)

Nonelectrical Machinery industries are generally exported less in New Jersey than in the nation as a whole.

The largest exporters from New Jersey are the chemical companies; they exported $2.23 billion of goods—almost 28 percent of the State's total shipment overseas (Table 5.11). Other large exporters are: Electric and Electronic Equipment—$1,021 million; Machinery—$791 million; Food—$631 million, and Primary and Fabricated Metals, which together exported over $1 billion in 1984.

In the United States, the largest exports came from the Machinery, Electric and Electronic and Transportation Equipment, followed closely by Chemicals.

FIGURE 5.11
ANNUAL CHANGES IN MANUFACTURING EMPLOYMENT
New Jersey and United States
1970–1986



Source: (22) and (55)

Manufacturing by Counties

The latest *Census of Manufactures* (1982) provides detailed information about the location of industries by counties. The following two charts present numbers of employment and output (value added) by counties for 1982 (Figures 5.12 and 5.13) They convey a clear picture of heavy manufacturing concentration in several northern counties like Bergen, Union, Middlesex, Hudson, Passaic and Morris. Very light manufacturing development is noticed in several southern and shore counties of Cape May, Atlantic, Ocean, Salem and in the Northwestern county of Sussex.

This uneven distribution is attributable to the traditional development of manufacturing close to New York City. For the last decade there has been a discernible trend toward locating industries in the central and southern counties of the State.

Table 5.10
Share of Exports in Total Shipments, 1984 United States and New Jersey

Industry	Percent of Exports	
	N.J.	U.S.
ALL INDUSTRIES	10.32	11.90
Food & Kindred Products	7.13	4.83
Textile Mill Products	8.05	7.38
Apparel & Other Textile Prod.	2.37	2.97
Furniture & Fixtures	4.45	2.68
Paper & Allied Products	9.15	10.63
Printing & Publishing	5.53	4.19
Chemicals & Allied Products	13.34	16.61
Petroleum & Coal Products	7.16	7.81
Rubber & Plastics Products	11.08	11.68
Leather & Leather Products	27.88	6.81
Stone, Clay & Glass Products	8.00	7.21
Primary Metals	19.38	19.54
Fabricated Metals	9.94	11.60
Machinery, Except Electrical	18.31	21.46
Electric & Electronic Equipment	15.28	18.21
Transportation Equipment	3.52	12.77
Instruments & Related Products	12.83	15.38
Miscellaneous Industries	5.81	7.38

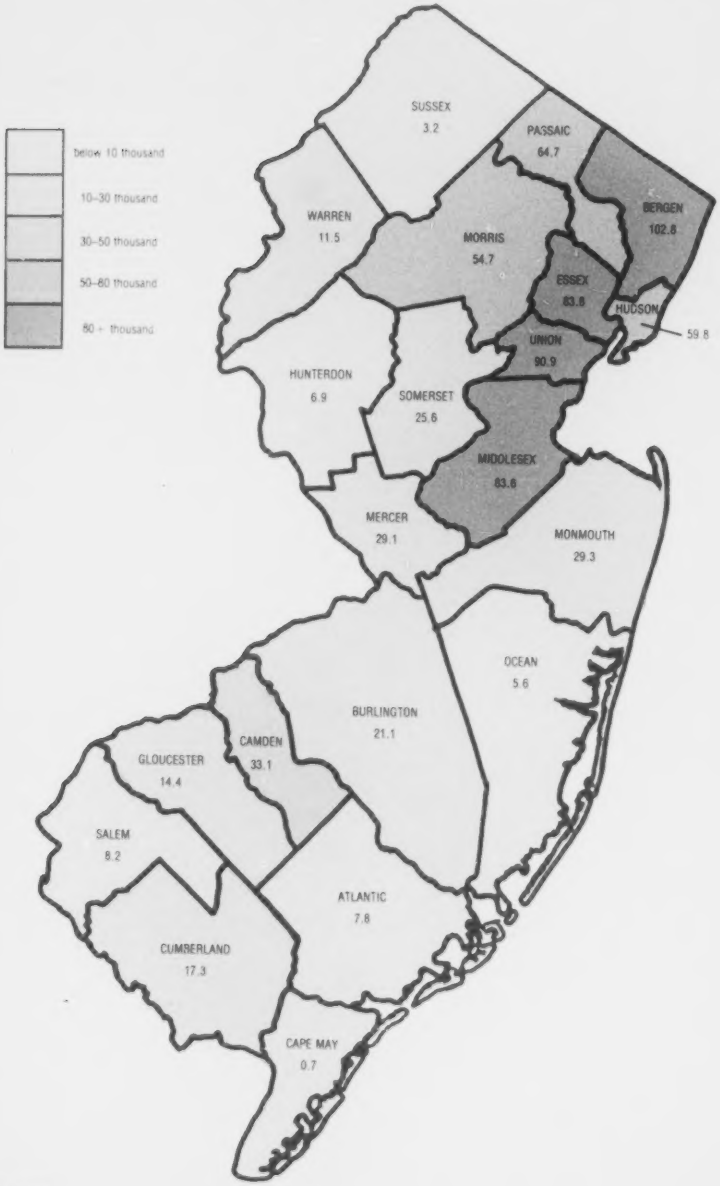
Source: (43)

Table 5.11
Direct and Supportive Exports, 1984
New Jersey and United States ($ million)

Industry	New Jersey	United States
ALL INDUSTRIES	$8,024.2	$268,278
Food & Kindred Products	630.5	14,494
Textile Mill Products	86.2	4,083
Apparel & Other Textile Products	65.1	1,712
Furniture & Fixtures	28.4	805
Paper & Allied Products	270.0	10,074
Printing & Publishing	228.9	4,334
Chemicals & Allied Products	2,230.6	32,936
Petroleum & Coal Products	434.6	14,769
Rubber & Plastics Products	320.7	8,117
Leather & Leather Products	76.2	635
Stone, Clay & Glass Products	175.8	3,852
Primary Metals	553.8	23,268
Fabricated Metals	454.5	15,766
Machinery, Except Electrical	790.5	45,161
Electric & Electronic Equipment	1,021.0	34,228
Transportation Equipment	214.1	35,779
Instruments & Related Products	331.4	8,143
Miscellaneous Industries	99.0	2,048

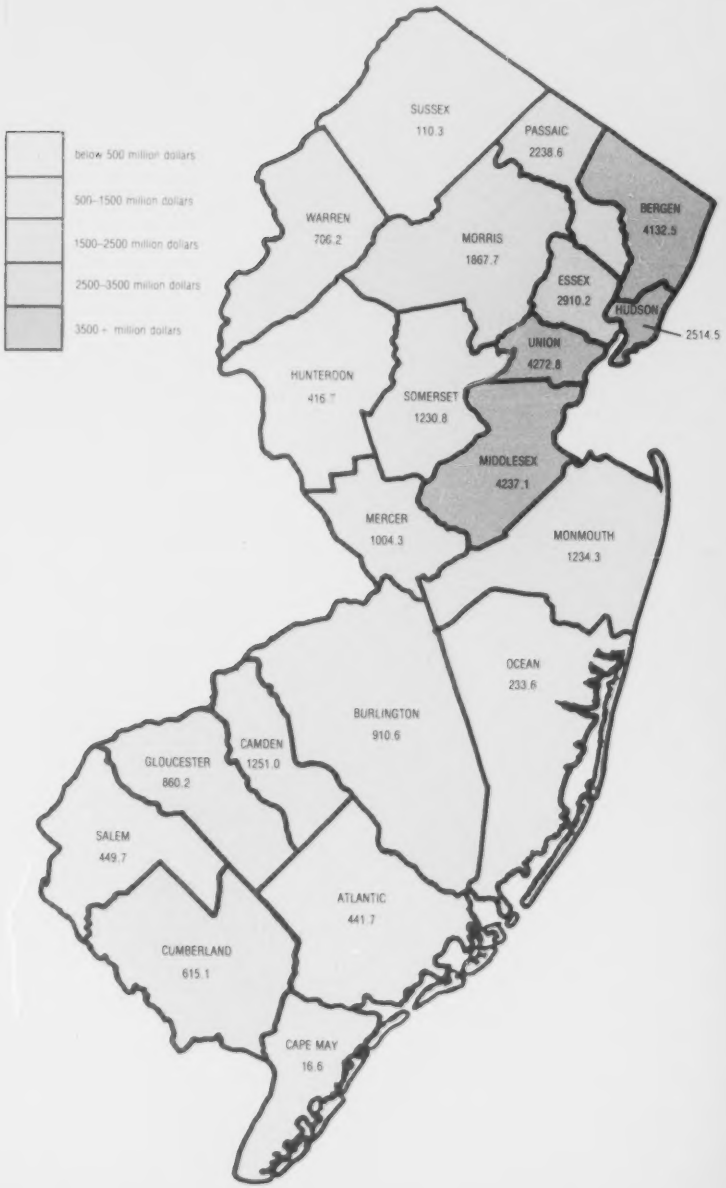
Source: (43)

FIGURE 5.12
EMPLOYMENT IN MANUFACTURING, 1982



Source: (22)

FIGURE 5.13
OUTPUT (value added) BY NEW JERSEY COUNTIES, 1982



Source: (43)

VI

TRANSPORTATION, COMMUNICATION AND PUBLIC UTILITIES

VI

TRANSPORTATION, COMMUNICATION AND PUBLIC UTILITIES

A highly-developed state, such as New Jersey, must rely heavily on its transportation, communication and public utility industries. The services of this sector are needed to overcome the difficulties attributable to high population density and the high degree of industrialization.

In 1986, this sector employed 229,800 workers (6.6% of total non-agricultural employment), up 18.1 percent from 194,500 in 1980 (Table 6.1).

Table 6.1
Employment in Transportation, Communication and Public Utilities
New Jersey, 1986

	Annual Average (000)
Total	229.8
Railroad Transportation	5.8
Other Transportation	133.1
Communication*	61.9
Electric, Gas & Sanitary Services	28.9

*Excluding postal workers.
Source: (22)

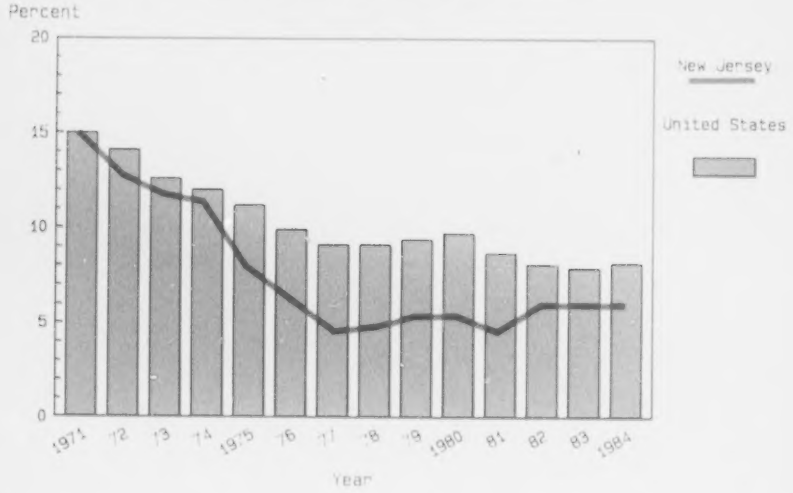
1. TRANSPORTATION

New Jersey is situated in the center of the nation's foremost megalopolis, running along the Atlantic seaboard from Washington, D.C. to Boston. This location assures the State of ready access to many convenient and efficient transportation systems. In addition, New Jersey's healthy and growing economy contributes much to the total demand for transportation services.

The share of total state general expenditures devoted to highways has declined from the 15 percent, registered in the early 1970s, to only 5.5 percent in 1984. While it is also true that the average percentage of total expenditures for the 50 States taken as a whole has declined, New Jersey's share, which was approximately equal to the United States average

in 1971, has fallen below the U.S. average and has remained there (Figure 6.1).

FIGURE 6.1
PERCENTAGE OF BUDGET DEVOTED TO HIGHWAYS
INCLUDING FEDERAL AID, 1971–1984



Source: (33)

Roads and Highways

New Jersey is laced with thoroughfares and highways ranging from remote country roads to many-laned super highways. Of the total 33,883 miles of roads in the State, only 7.6 percent are considered highways. Municipal and county roads make up the largest percentage of the State road system (Table 6.2).

Motor Vehicles and Licensed Drivers

In 1985, there were 5.833 million licensed drivers in the State, representing 77.1 percent of the population. This proportion exceeds those of the United States and the other Middle Atlantic states (Table 6.3).

Table 6.2
New Jersey Road Mileage, 1985

	Miles of Road	Percent of Total	Estimated Vehicle Miles Traveled (billion)	Percent of Total
Turnpike	132	0.4	2.95	5.5
Garden State Parkway	156	0.5	3.06	5.8
Atlantic City Expressway	44	0.1	0.47	0.9
State Highways	2,251	6.6	19.68	37.1
County Roads	6,679	19.7	17.63	33.2
Municipal Roads	24,043	71.0		
Institutions, Parks & Forests	503	1.5	9.32	17.5
Other	51	0.2		
TOTAL	33,859	100.0	53.11	100.0

Source: (33)

There were 4.412 million automobiles registered in the State in 1985, 583 per thousand population. This represents a total of 1.3 licensed drivers, or 1.7 persons per automobile (Table 6.4 and Figure 6.1).

In addition to the over four million automobiles, there were 495,000 trucks and buses and 127,000 motorcycles registered in New Jersey in 1985.

Vehicle Travel

In 1985, over 53 billion vehicle-miles were traveled on the State's roads and highways. Of this, 5.6 percent was on the turnpike, 5.8 percent

Table 6.3
Licensed Drivers, Mid-Atlantic States, 1985

	Number (000)	Percent of Population
United States	158,224	66.3
New York	9,842	55.3
New Jersey	5,833	77.1
Pennsylvania	7,918	66.8

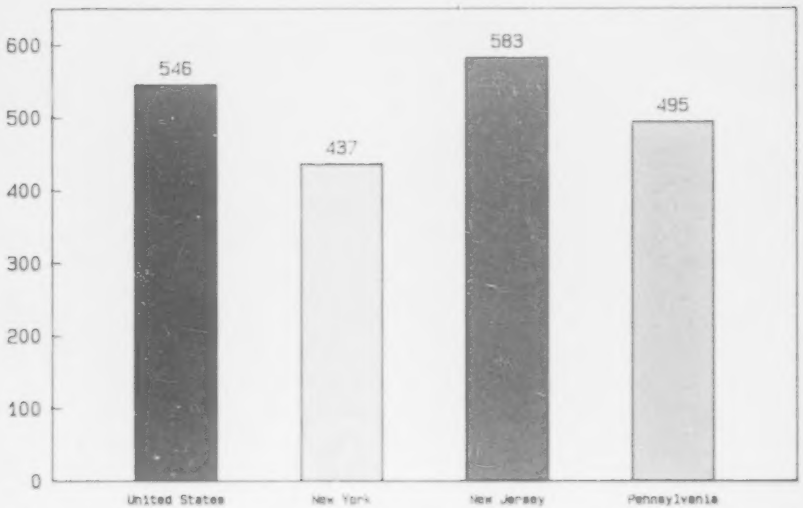
Source: (29)

Table 6.4
Automobile Registrations
United States, Regions and States, 1985

	Automobiles Registered (000)	Licensed Drivers Per Automobile	Persons Per Automobile
United States	130,364	1.21	1.83
New England	7,819	1.13	1.62
New York	7,774	1.28	2.29
New Jersey	4,412	1.32	1.71
Pennsylvania	5,867	1.35	2.02
South Atlantic	23,654	1.16	1.70

Source: (29)

FIGURE 6.2
NUMBER OF AUTOMOBILES PER 1,000 POPULATION, 1985



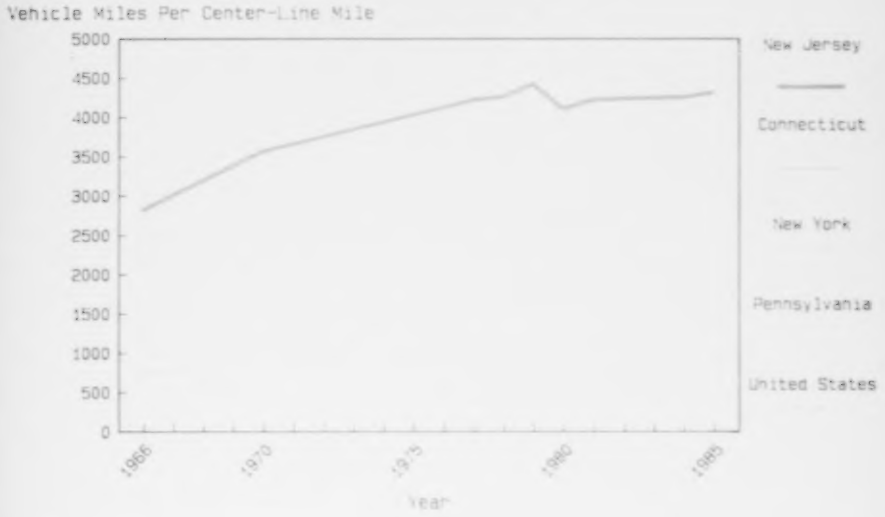
Source: (48)

on the Garden State Parkway and 0.9 percent on the 44 mile long Atlantic City Expressway. Over 70 percent of all vehicle-miles traveled in the State were on state and county roads (Table 6.2).

Figure 6.3 shows that New Jersey's daily travel per mile of highway has exceeded corresponding figures for nearby states and the United States. In 1985, average daily travel per center-line mile was 4,294 vehicle miles,

over 3.4 times the U.S. level. Other states in the area have registered travel-per-mile of road far below New Jersey. However, New Jersey's travel miles per capita tallied somewhat below the national average, but far above the numbers for New York and Pennsylvania (Table 6.5).

FIGURE 6.3
ESTIMATED AVERAGE DAILY TRAVEL PER MILE OF HIGHWAY, 1966–1985



Source: (33)

Table 6.5
Motor Vehicle Travel Miles
1985

	Total Miles (millions)	Miles Per Licensed Driver	Miles Per Capita
United States	1,774,762	11,314	7,434
New York	90,518	9,198	5,090
New Jersey	53,108	9,166	7,023
Pennsylvania	75,428	9,984	6,364

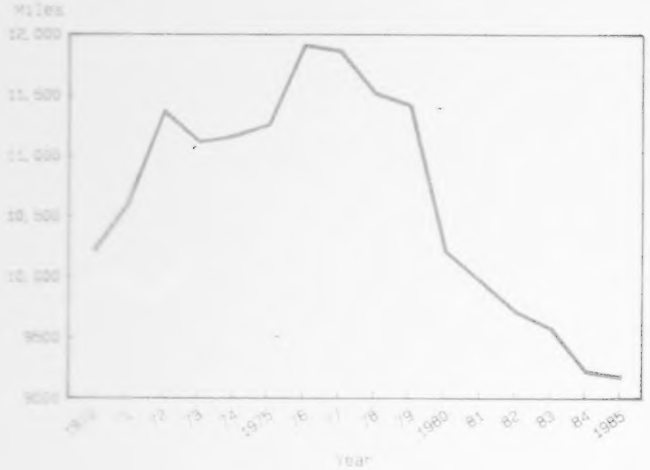
Source: (58)

Driving Habits

Licensed drivers in New Jersey continue to drive fewer motor vehicle miles each year, a trend unbroken since 1976. At that time, the average

driver in New Jersey logged just under 12,000 miles compared to the 1985 figure of only 9,166 (Figure 6.4).

FIGURE 6.4
NEW JERSEY MOTOR VEHICLE MILES PER LICENSED DRIVER, 1970–1985



Source: (29)

Motor Vehicle Fatalities

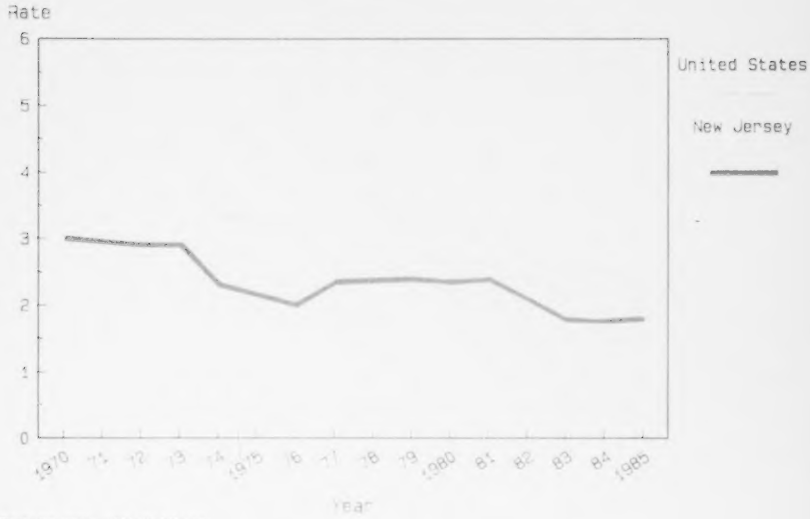
The State's traffic safety record continues to be among the best in the nation. In 1985, New Jersey recorded a motor vehicle fatality rate of 1.81 per 100 million miles vs. the national rate of 2.47 (Figure 6.5).

Table 6.6
State Gasoline Tax
Mid-Atlantic Region
Cents Per Gallon

	1970	1980	1984	1985
National Weighted Average	7.0	8.2	10.6	n.a.
New York	7.0	8.0	8.0	8.0
New Jersey	7.0	8.0	8.0	8.0
Pennsylvania	8.0	11.0	12.0	12.0

n.a.: not available
Source: (48)

FIGURE 6.5
MOTOR VEHICLE FATALITY RATES
1970–1985



(Rate = Deaths per 100 Million Vehicle Miles)

Source: (29)

Gasoline Taxes

Table 6.6 compares gasoline taxes in New Jersey with those in other Mid-Atlantic states and with the national weighted average. New Jersey's tax rate is below that of Pennsylvania and the latest weighted average for all states.

Railroads

New Jersey has a well-developed network of Class I railroads, with a total of 1,268 miles of track or 45 miles per 1,000 square miles of land area, a figure which is higher than that of any other state (Table 6.7). Recently, significant improvements have been made throughout the State, which have done much to modernize the rail system. For example: roadbeds have been renewed on the corridor line from Trenton to Newark and New York, and old wooden ties have been replaced by new concrete ones; some passenger stations have been rebuilt or remodeled and platforms have been raised to train level.

Table 6.7
Class I* Railroad Mileage
1985

	Total Miles	Miles Per 1,000 Square Miles of Land Area
United States	159,360	45.03
New England	2,098	33.30
New York	3,565	75.25
New Jersey	1,268	169.84
Pennsylvania	5,232	116.56
South Atlantic	22,358	83.77

*Class I includes all railroads with annual operating revenues of $87.8 million (in 1978 dollars) or more. Class II and III data are no longer available.
Source: (2)

2. COMMUNICATION

New technology is being rapidly introduced into the communication sector. Included are such esoteric innovations as fiber-optics networks and communication satellites, which enable the beaming of live radio and television broadcasts throughout the world. New Jersey hosts several major companies who lead the U.S. in research and development in these fields.

New Jersey was served by ten television stations, five commercial and five non-commercial, in 1985. In 1984, there were 67 cable television systems in the State, serving 493 communities. In 1985, there were 1.542 million subscribers to cable TV, representing 56.7 percent of all television-owning households.

The State's proximity to New York and Philadelphia means that most television coverage is from VHF stations in these cities. This implies that there may be some under-reporting of State news and scheduled activities.

In 1986, there were 57 radio stations including 27 educational radio stations in the State. In 1985, there were 26 daily newspapers, 16 Sunday and 159 weekly papers in New Jersey. Daily circulation was 1.705 million. Sunday circulation totaled 1.756 million; the weekly figure is not available.

On December 31, 1985 telephone access lines totaled 4.173 million, including 2.923 million residential and 1.170 million business lines.

3. PUBLIC UTILTIIES

Public utilities distribute and sell electricity, natural gas and water to New Jersey residents and businesses. From 1972 to 1982, growth of electric customers outpaced growth of gas by a multiple of four, growing 1.47 percent annually vs. 0.38 percent annually for gas connections (Table 6.8).

Table 6.8
New Jersey Natural Gas and Electric Customers
All Sectors, 1972 and 1982

	Number of Customers (000)		Average Annual Growth Rate 1972-82
	1972	1982	%
Gas	1,800	1,870	0.38
Electric	2,486	2,877	1.47

Sources: (59) and (60)

New Jersey devoted the largest share (30.5%) of its total energy consumption to transportation, compared to 26.8 percent in the nation (Table 6.9). The United States industrial-use share exceeded New Jersey's rate by 10.31 percentage points. Commercial use accounted for the lowest sectoral shares for the State and nation, while residential use was a little greater—20.3 percent for the United States, 23.1 percent for New Jersey.

Electricity

Production of electrical energy rose 4.0 percent per annum over the 1975-85 period, a rate of growth 54 percent higher than the United States rate (Table 6.10). On the other hand, generating capacity in the U.S. expanded at an annual rate which is twice the New Jersey figure.

Table 6.9
Energy Consumption by End-Use Sector, 1985 (percent)

	United States	New Jersey
Transportation	26.85	30.50
Commercial	15.36	19.19
Industrial	37.49	27.18
Residential	20.30	23.13
TOTAL	100.00	100.00

Source: (48)

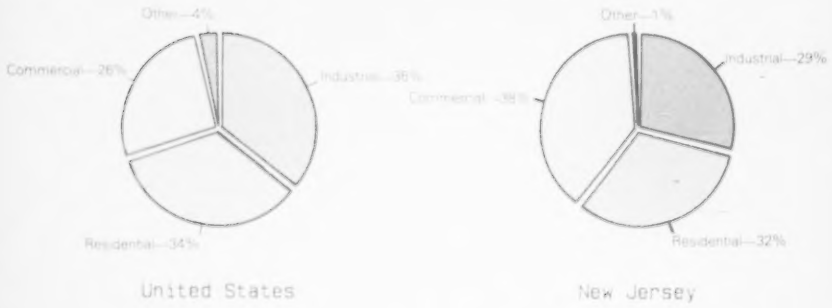
Table 6.10
Electric Energy Production and Installed Generator Capacity
Regions and states, 1975-1985

	Production (billion kWh)		Average Annual Rate of Change (%)	Installed Capacity (million kWh)		Average Annual Rate of Change (%)
	1975	1985		1975	1985	
United States	1,917.6	2,469.8	2.6	508.3	698.1	3.2
New England	69.9	81.4	1.5	20.4	21.4	0.5
New York	107.3	111.8	0.4	28.4	32.5	1.4
New Jersey	23.2	34.4	4.0	11.4	13.4	1.6
Pennsylvania	108.2	135.0	2.2	27.7	36.4	2.8
South Atlantic	342.3	467.9	3.2	92.5	129.7	3.4

Source: (48)

New Jersey's commercial sector received 38 percent of total electrical energy sales vs. a national figure of only 26 percent (Figure 6.6). The residential and industrial sectors used relatively more electricity in the United States (34% and 36%, respectively) than in the State (32% and 29%).

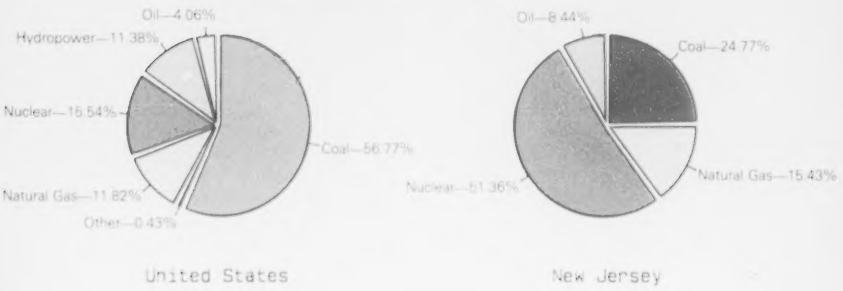
FIGURE 6.6
ELECTRIC ENERGY SALES BY SECTOR
United States and New Jersey, 1985



Source: (60)

New Jersey uses relatively far less coal than the United States in generating its electricity; the State produces 24 percent of its electric energy from coal, while the U.S. uses coal for 57 percent of its electric power production. In the main, the State compensates for this by producing 52 percent of its electricity from nuclear plants compared to the U.S. figure of only 16 percent (Figure 6.7).

FIGURE 6.7
FUELS USED IN GENERATING ELECTRICITY
United States and New Jersey, 1985



Source: (60)

In 1983, New Jersey industries used a larger share of total natural gas sales than did U.S. industries. The U.S. industrial sector used 46 percent of the total, a wide margin over New Jersey's 31 percent usage. On the other hand, the State's residential usage exceeded the U.S. figure by 44 to 35 percent. As was the case with electric sales, the commercial share of gas use in New Jersey overshadowed the U.S. 24 to 18 percent.

Nationally, utilities sell more natural gas per capita than the New England, South Atlantic and Mid-Atlantic regions, including New Jersey; per capita sales in the United States were 52.8 million BTU's in 1985, compared to the State's sales of 44.3 million BTU's (Table 6.11). Sales in New Jersey ran higher than the reference states and regions, however, except for Pennsylvania with sales of 44.4 million BTU's per capita.

Table 6.II
Natural Gas Industry Sales
Regions and States, 1985

	Total Sales (trillion BTU's)	Per Capita (million BTU's)
United States	12,616	52.8
New England	349	27.6
New York	639	35.9
New Jersey	335	44.3
Pennsylvania	526	44.4
South Atlantic	1,095	22.2

Source: (59)

Table 6.12 compares gas utility prices of New Jersey with those of selected regions and states. For all categories of customers, prices in the

State were higher than in the nation and South Atlantic states, but lower than in New York. Residential users paid the highest prices in New Jersey as well as in the rest of the nation.

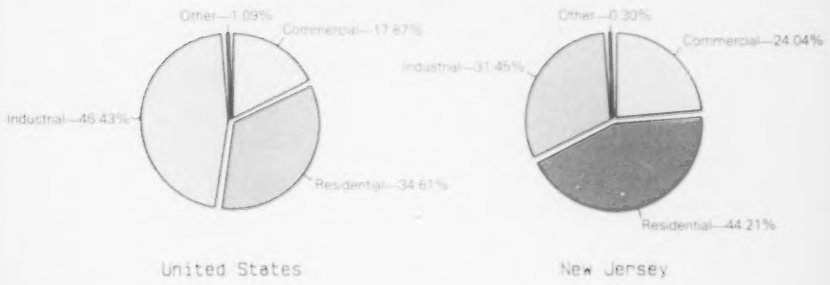
Table 6.12
Gas Utility Prices
Regions and States, 1983
($ per million BTU's)

	Residential	Commercial	Industrial
United States	5.88	5.51	4.41
New England	8.39	7.32	5.01
New York	7.84	6.62	5.53
New Jersey	7.31	6.54	5.09
Pennsylvania	6.25	5.91	5.08
South Atlantic	5.79	5.27	4.02

Source: (59)

Industrial use represented approximately the same share of New Jersey's total natural gas use in 1983 as it did in 1981 (31.5% in both years); the other shares remained approximately unchanged as well. This is in contrast to the national figure, which fell seven percentage points, from 53 to 46 percent, compensated by a 2.6 percent increase in commerical use to 17.9 percent and a larger gain in residential use, from 29.9 percent to 34.6 percent (Figure 6.8).

FIGURE 6.8
NATURAL GAS USED BY SECTOR
United States and New Jersey, 1983



Source: (59)

VII

TRADE AND SERVICES

VII

TRADE AND SERVICES

1. TRADE

New Jersey's wholesale and retail trade sector employed 832,800 workers in 1986, an increase of 22 percent since the beginning of the decade, exceeding the United States gain by five percentage points (Table 7.1 and Figure 7.1).

Table 7.1
Wholesale and Retail Trade Employment
United States and Regions
1960-1986

	Number of Employees (000)				Average Annual Percent Change		
	1960	1970	1980	1986	1960–1970	1970–1980	1980–1986
United States	11,391	15,040	20,310	23,831	2.82	3.05	2.70
New England	693.6	992.4	1,175.3	1,448.9	3.65	1.71	3.55
New York	1,251.2	1,445.1	1,465.2	1,675.6	1.45	0.14	2.26
New Jersey	374.6	538.2	680.3	832.8	3.69	2.37	3.43
Pennsylvania	684.6	816.5	989.1	1,094.9	1.78	1.94	1.71
South Atlantic	1,506.8	2,174.6	3,239.3	4,151.9	3.74	4.07	4.22

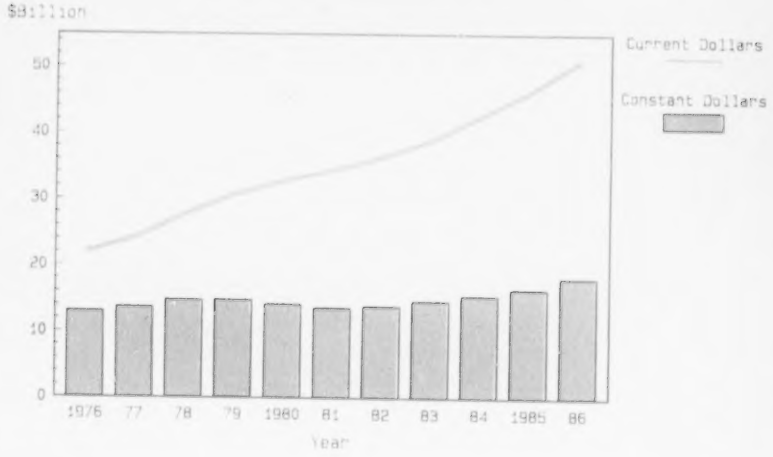
Sources: (22) and (57)

Retail Trade

While the dollar value of retail sales increased by 55.5 percent from $32.65 billion in 1980 to $50.78 billion in 1986, much of that gain was due to inflation; retail sales in constant (1967) dollars increased by 28.4 percent—rising from $14.2 billion in 1980 to $18.23 billion in 1986.

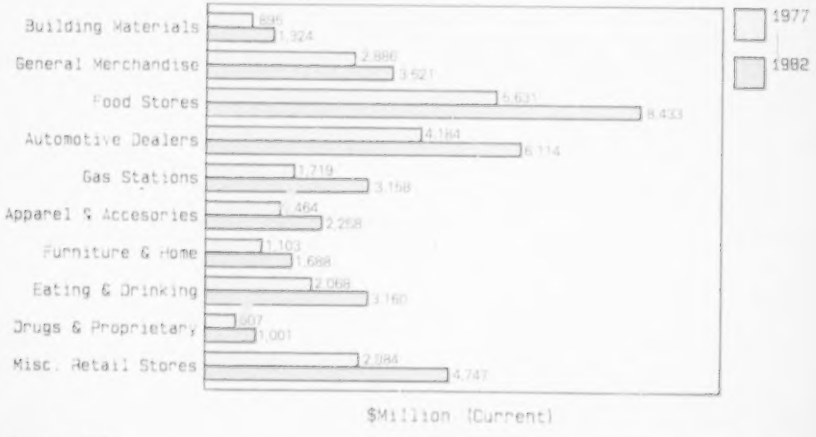
In 1982, 58,040 total retail sales establishments in the State, with or without payrolls, had total sales of $36.3 billion or $625,430 per establishment. Figure 7.2 shows the breakdown of retail sales for establishments with payroll only. Included are the sales totals for 43,045 establishments with payrolls which accounted for 98 percent of the state's total sales in 1982.

FIGURE 7.1
YEARLY RETAIL SALES, 1976–1986
Current and Constant (1967) Dollars



Source: (22)

FIGURE 7.2
RETAIL SALES OF NEW JERSEY, 1977 AND 1982 ESTABLISHMENTS WITH PAYROLL IN
Millions of Current Dollars



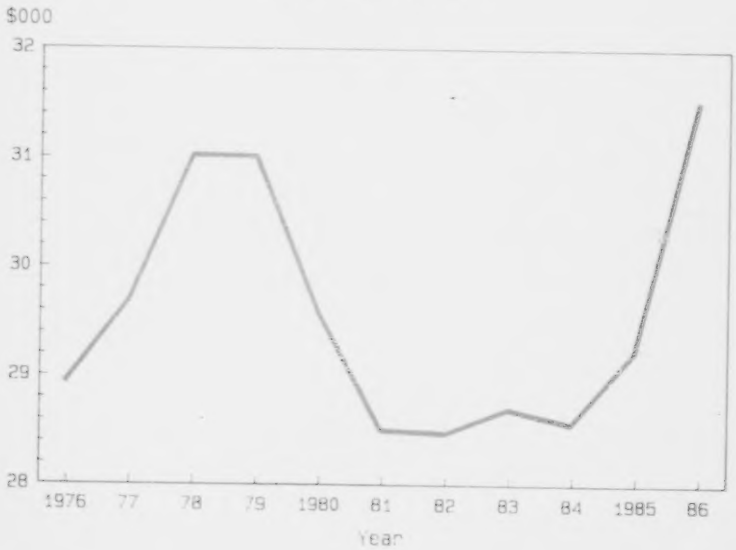
Source: (52)

Total Retail Sales and Productivity

New Jersey's retail sales total of over $48 billion in 1985 yields per capita sales of $6,417 exceeding the United States figure of $5,844 and the states and regions levels used for comparison, except for New England (Table 7.2).

Between 1970 and 1986, retail sales per employee rose by 40.5 percent, or an average of 3.5 percent per year. Constant dollar retail sales per employee (productivity) experienced wide fluctuations, however, with virtually all of the productivity gain occurring during the latest year. Basically, there was no gain in the years prior to 1986; from 1976 to 1978 a gain was experienced, but it was all lost by 1981. Figure 7.3 depicts the fluctuations of productivity in retail sales.

FIGURE 7.3
ANNUAL RETAIL SALES PER EMPLOYEE
New Jersey, 1976–1986



Source: (22)

Table 7.2
Total and Per Capita Retail Sales of All Establishments*

	Total ($ billion)		Per Capita ($)		
	1982	1985	1982 ($)	1985 ($)	Average Annual Increase (%) 1982–1985
United States	1,065.9	1,395.2	4,598	5,844	8.3
New England	62.1	88.1	4,997	6,960	11.7
New York	72.3	95.8	4,115	5,388	9.4
New Jersey	36.3	48.5	4,887	6,417	9.5
Pennsylvania	50.8	64.3	4,276	5,424	8.2
South Atlantic	176.4	238.7	4,605	5,934	8.8

Source: (48).
*The latest available statistic from a business census. These figures are slightly different from those available in the New Jersey Economic Indicators which are estimates based on sampling.

Retail Prices

Retail Prices (as measured by the average of the "commodities only" components of the average New York-Northeastern New Jersey and Philadelphia-New Jersey Consumer Price Index) rose by 65.6 percent, or 5.2 percent per annum between 1976 and 1986. During the period 1976-1985, prices rose continuously, but the increases slowed after 1980; prices actually declined in 1986 (Figure 7.4).

Wholesale Trade

Wholesale trade thrives in New Jersey due to a large "home" market as well as its prime location and transportation system which allow wholesalers to reach major out-of-state markets overnight. New Jersey's 14,739 wholesale establishments had sales of nearly $90 billion in 1982, seventh

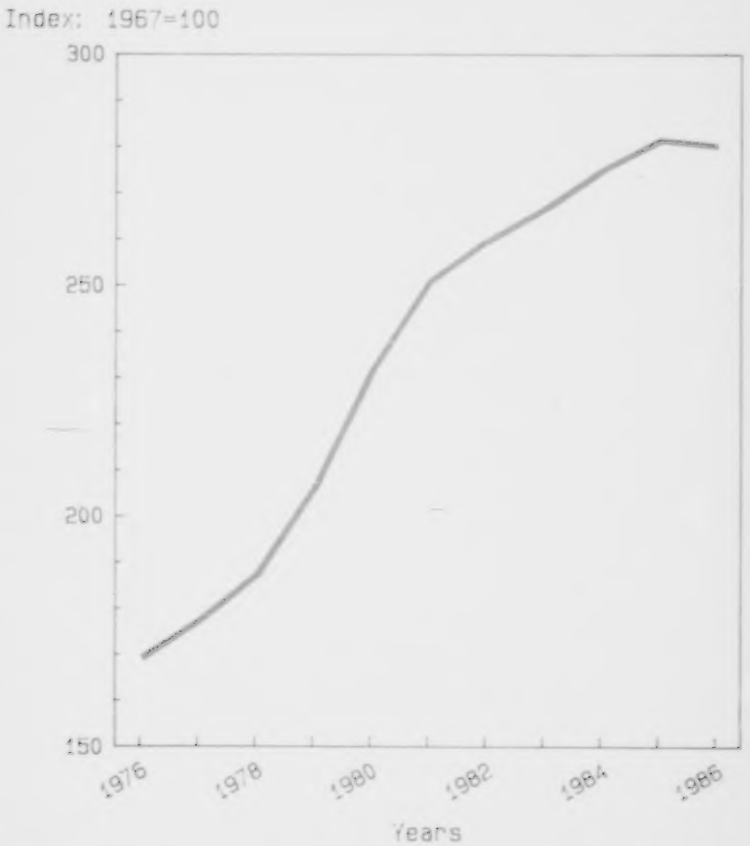
Table 7.3
Wholesale Trade
Regions and States

	Establishments 1982	Receipts ($ billion)		Receipts Average Annual Change 1977–1982 (%)
		1977	1982	
United States	415,829	$1,258.4	$1,997.9	9.7%
New England	20,528	58.4	97.5	10.8
New York	39,106	165.4	261.2	9.6
New Jersey	14,739	55.3	89.3	10.1
Pennsylvania	17,873	53.8	78.4	7.8
South Atlantic	59,685	153.2	244.5	9.8

Source: (50).

highest total among states (Table 7.3). The nominal value of the State's wholesale trade increased at an average annual rate of 10.1 percent from 1977 to 1982 compared to average increase of 9.7 percent for the nation, a somewhat narrower gap than had existed between 1967 and 1977 (11.9% vs. 10.6%).

FIGURE 7.4
NEW JERSEY'S "COMMODITY ONLY" CONSUMER PRICE INDEX
1976–1986



Source: (22)

The State's share of U.S. wholesale trade registered a slight gain between 1977 and 1982, rising from 4.4 percent in 1977 to 4.5 percent in 1982. By contrast, the share of the retail trade market stood at 3.4 percent in 1982.

Sales by Type of Operation

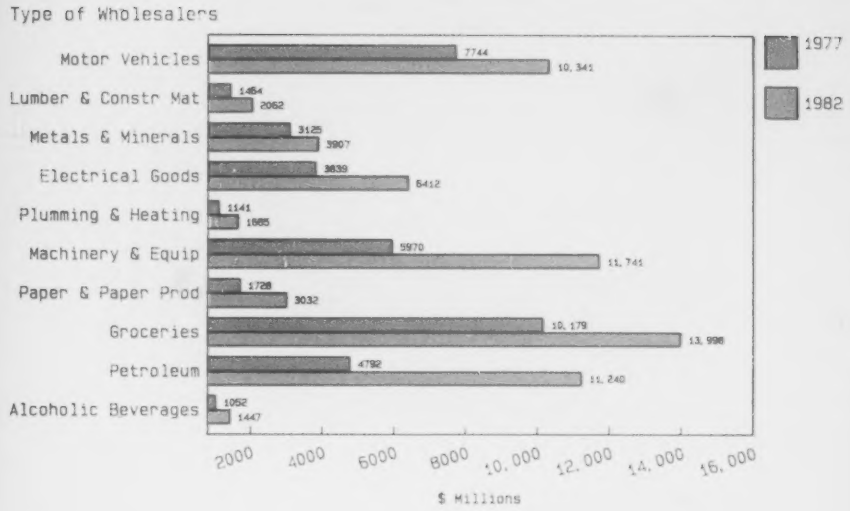
New Jersey's grocery wholesalers and related wholesaling categories made $14.0 billion of the State total of $89.4 billion sales in 1982 (Table 7.4). Machinery, equipment and supplies were second with $11.7 billion followed by petroleum and related products ($11.2 billion), and motor vehicle and auto parts ($10.3 billion). Durable goods wholesaling grew by 81.1 per cent during the five year period; nondurables gained 57.9 percent. (Figure 7.5).

Table 7.4
New Jersey Wholesale Trade, 1982

	1982 Sales ($ million)	Rank	
		N.J.	U.S.
Motor Vehicle & Auto Parts	$10,341	4	5
Lumber and Construction	2,062	13	11
Metal and Minerals	3,907	8	7
Electrical	6,412	7	6
Hardware, Plumbing, Heating	1,665	14	12
Machinery, Equipment and Supplies	11,741	2	4
Paper and Paper Products	3,032	11	10
Groceries and Related	13,998	1	3
Petroleum and Related	11,240	3	2
Alcoholic Beverages	1,447	15	13
Chemicals and Allied	7,693	5	8
Drugs, Drug Proprietaries and Sundries	3,159	9	14
Apparel, Piece Goods and Notions	3,106	10	9
Sporting Goods, Hobbies and Toys	2,210	12	15
Other	7,361	6	1
Total	89,375		

Sources: (39) and (55).

FIGURE 7.5
WHOLESALE SALES IN NEW JERSEY
Millions of Current Dollars, 1977–1982



Source: (50)

Table 7.5 presents the 1985 employment figures by major industry groups. In New Jersey, as well as in the U.S., Machinery Equipment and Supplies had the largest number of employees, followed by Groceries and Related Products, Electrical Goods, and Motor Vehicles and Automotive Equipment.

Geographical Patterns

Wholesale trade in the State is unevenly distributed among the 21 counties (Table 7.6). Bergen County ranks number 1 with 26 percent of total sales, followed by Middlesex (13%) and Essex County (10%). Salem County is at the other extreme with only 0.1 percent of the State's total sales.

Table 7.5
Composition of Wholesale Employment in 1985
New Jersey and United States

	New Jersey		
	Number of Employees	% of Total	United States % of Total
Motor Vehicles & Automotive Equipment	19,242	7.4	7.6
Furniture & Home Furnishings	8,047	3.1	2.3
Lumber and Construction Materials	7,855	3.0	3.8
Sporting Goods, Toys and Hobby Goods	7,127	2.7	1.4
Metal and Minerals, Except Petroleum	6,072	2.3	2.4
Electrical Goods	26,205	10.1	8.7
Hardware Plumbing & Heating Equipment	9,697	3.7	4.4
Machinery, Equipment & Supplies	56,065	21.5	25.3
Miscellaneous Durable Goods	8,145	3.1	3.4
Paper & Paper Products	11,115	4.3	3.2
Drugs, Proprietaries & Sundries	11,493	4.4	2.9
Apparel, Piece Goods & Notions	11,189	4.3	3.3
Groceries & Related Products	27,805	10.7	12.9
Chemicals & Allied Products	9,580	3.7	2.3
Petroleum & Petroleum Products	4,922	1.9	3.6
Beer, Wine & Distilled Beverages	4,054	1.6	2.6
Miscellaneous Nondurable Goods	15,319	5.9	7.5
Other	16,408	6.3	1.6
Total	260,340	100.0	100.0

Source: (39) and (55)

2. SERVICES

Service establishments play a significant part in New Jersey's development, providing jobs for 793,000 people in 1985, employing slightly more than 23 percent of the State's total nonagricultural workers. In 1982, New Jersey's more than 49,000 service establishments with payroll had receipts in excess of $17.7 billion.

Service Industry Employment

New Jersey's service industry has grown consistently since 1960, following a nationwide trend. In 1960 New Jersey employed 3.42 percent of our country's service employees; in 1982 the State employed 3.48 percent. The biggest leap came in recent years as, in 1986, New Jersey employed 3.60 percent of the nation's service industry employment (Table 7.7).

Table 7.6
Sales in the Wholesaling Sector
New Jersey Counties, 1982

County	Sales ($000)	Share of State (%)
Atlantic	654,775	0.7
Bergen	23,108,573	25.9
Burlington	1,957,348	2.2
Camden	6,103,687	6.8
Cape May	145,228	0.2
Cumberland	750,181	0.8
Essex	8,656,690	9.7
Gloucester	1,957,478	2.2
Hudson	7,216,118	8.1
Hunterdon	313,193	0.4
Mercer	1,513,939	1.7
Middlesex	11,293,787	12.6
Monmouth	1,345,708	1.5
Morris	5,452,295	6.1
Ocean	362,012	0.4
Passaic	5,081,554	5.7
Salem	104,395	0.1
Somerset	1,978,685	2.2
Sussex	162,597	0.2
Union	10,596,396	11.9
Warren	619,909	0.7
Total N.J.	89,374,548	100.0

Source: (48) and (50).

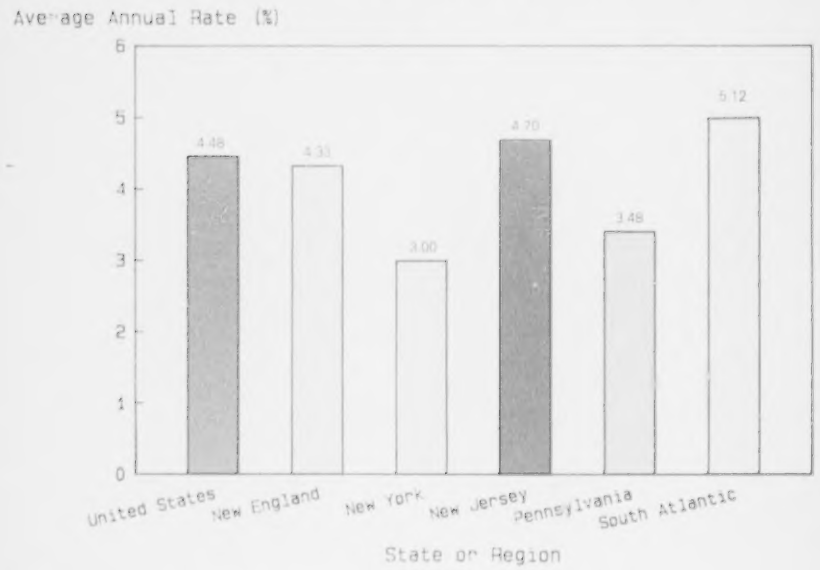
Table 7.7
Service Industry Employment as a Percent of United States
1960–1986

	1960		1986	
	Employees (000)	Percent of U.S.	Employees (000)	Percent of U.S.
United States	7,378	100.00	23,073	100.00
New England	513.6	6.96	1,545	6.70
New York	978.0	13.26	2,131	9.24
New Jersey	252.0	3.42	831	3.60
Pennsylvania	505.8	6.86	1,230	5.33
South Atlantic	1,043.5	14.14	3,596	15.59

Source: (55).

Between 1960 and 1986 the average annual rate of growth of service industry employment in New Jersey was 4.70 percent — above the rate in the United States (4.48%) and our neighboring states (3.00% in New York and 3.48% in Pennsylvania), but below the rate in the South Atlantic (4.87%) (Figure 7.6).

FIGURE 7.6
SERVICE INDUSTRY EMPLOYMENT GROWTH, 1960–1986



Source: (55)

Services Industries Mix

Total service employment in the State grew at an average annual rate of 4.8 percent between 1970 and 1980. Between 1980 and 1985 the growth accelerated to 6.7 percent — a reflection of New Jersey's trend toward a service-dominant economy (Table 7.8). The largest increases occurred in hotels and lodging which grew at an average annual rate of 11.8 percent and business services which grew at 9.7 percent (administrative and auxiliary employees are not assigned to any service categories).

Table 7.8
Growth in New Jersey's Service Employment*
1980–1985

	1980	1985	Average Annual Rate of Change (%) 1980–1985
Health	167,919	211,077	4.7%
Business Services	121,969	193,415	9.7
Personal Repair Services			
Personal Services	30,503	38,385	4.7
Auto Repair Services & Garage	18,470	23,413	4.9
Miscellaneous Repairs	11,571	12,355	1.3
Miscellaneous Services	30,976	44,310	7.4
Lodging and Entertainment			
Hotel and Lodging	33,063	57,652	11.8
Amusements & Recreation	15,830	18,637	3.3
Motion Pictures	3,580	3,898	1.7
Other			
Educational Services	37,863	43,759	2.9
Non-Profit & Membership Organizations	29,714	39,986	6.1
Social Services	27,152	35,875	5.7
Legal Services	18,754	26,455	7.1
Administrative & Auxiliary	4,812	14,070	23.9
State Total	552,592	763,783	6.7

*These figures are as of the week ending March 12. Accordingly, they are not comparable with figures in Table 7.7, which are yearly averages.
Source: (39).

The two largest service industries in the State are health and business services employing over 50 percent of New Jersey's service workers. Other large employers in the State are educational and hotel services (Table 7.9).

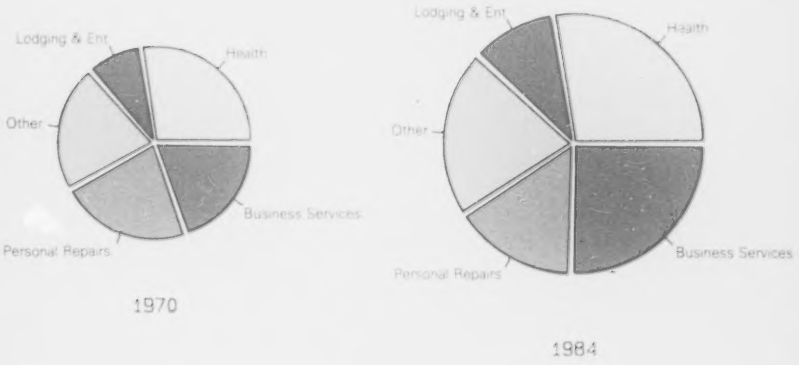
Figure 7.7 depicts the distribution of service employment in 1985 and the astonishing growth that has occurred in the sector since 1970. (Total size of the service industries in each year is represented by the area of the circle for that year.) Differences in circle areas depicts growth of services between two years.

Table 7.9
New Jersey Service Industry Ranked by Employment, 1985

Category of Services	Percent of Total Employment
Health	27.6
Business Services	25.3
Hotel and Lodging	7.5
Educational Services	5.7
Membership Organizations	5.2
Personal Services	5.0
Social Services	4.7
Legal Services	3.5
Auto Repair and Garage	3.1
Amusements and Recreation	2.4
Miscellaneous Repairs	1.6
Motion Pictures	0.5
Museums, Botanical and Zoological Services	0.1
Miscellaneous Services	5.8
Administrative and Auxiliary	1.8

Source: (39)

FIGURE 7.7
NEW JERSEY SERVICE EMPLOYMENT, 1970–1984



Source: (39)

Travel and Tourism

New Jersey has many outstanding tourist attractions. Its shores and beaches are among the best in the nation. Atlantic City — rejuvenated by the casino industry became a magnet for tens of millions of visitors annually.

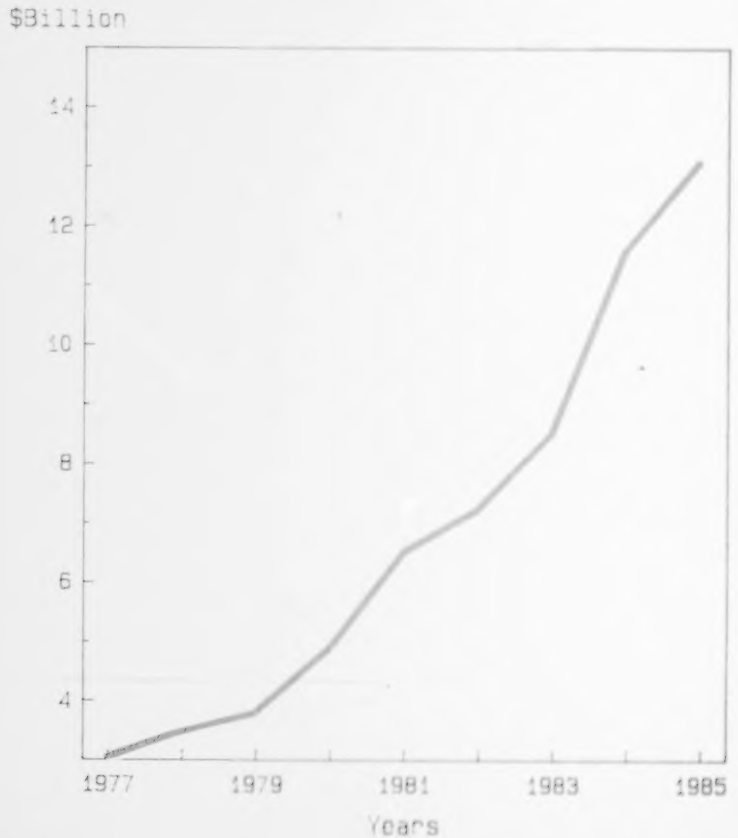
The Meadowland Sports Complex, Vernon Valley Ski Resort, and Great Adventure Amusement Park are among the most frequently visited areas.

In the last several years, the State has devoted considerable and increasing resources to describe the Garden State to U.S. and foreign tourists. The results of these efforts are visible in the growth of travel and tourism expenditures over the last eight years (Figure 7.8).

Between 1977 and 1985 expenditures on travel and tourism in the State of New Jersey increased from $3.032 million to $13.100 million, for an overall increase of 332 percent, or 20 percent per annum.

New Jersey's share in total U.S. travel and tourism expenditures increased from 3.85 percent in 1982 to 5.34 percent in 1985. Table 7.10

FIGURE 7.8
TRAVEL EXPENDITURES
New Jersey, 1977–1985



Source: (7)

Table 7.10
Domestic Travel Expenditures, 1982–1985

Year	Expenditures (million $)				Shares in Total U.S. (%)		
	United States	New Jersey	New York	Pennsylvania	New Jersey	New York	Pennsylvania
1982	$185,003	$7,132	$12,890	$7,061	3.85	6.97	3.82
1983	195,881	8,361	13,611	7,399	4.27	6.95	3.78
1984	222,955	11,416	15,653	8,352	5.12	7.03	3.75
1985	242,443	12,933	16,538	9,321	5.34	6.83	3.85
Growth 1985/1982 (%)	31.05	81.34	28.30	32.00	38.70	−2.00	0.01

Source: (7)

compares travel and tourism expenditures in New Jersey with those in New York state, Pennsylvania and the United States.

As a result of an 81.3 percent expenditure increase in the State versus 32 percent nationwide, New Jersey expanded its market share from 3.85 percent in 1982 to 5.34 percent in 1985. Neither New York State, nor Pennsylvania recorded any increase in the market share of domestic travel and tourism during the 1982-1985 years.

Table 7.11 compares New Jersey's employment in travel-related industries with those for the U.S. and neighboring states. In the United States, employment in travel-related industries (public and auto transportation, lodging, food service, entertainment and recreation, general retail trade, and travel arrangements) was nearly 4.8 million, or 4.9 percent, of total employment in 1985.

Table 7.11
Employment in the Travel and Tourism Industry, 1982–1985

Year	Number of Employed (000)				Share in Total Employment			
	U.S.	N.J.	N.Y.	PA.	U.S.	N.J.	N.Y.	PA.
1982	4,355	169.4	259.5	179.5	4.8	5.5	3.6	3.9
1983	4,445	186.1	258.4	179.4	4.9	5.9	3.5	4.0
1984	4,493	207.2	260.1	177.5	4.7	6.2	3.4	3.8
1985	4,759	215.6	265.1	194.8	4.9	6.3	3.4	4.1

Source: (7)

New Jersey's travel-related employment was 215,600 in 1985, or 6.3 percent of total employment. This share of the State's total employment was significantly above those of New York and Pennsylvania. Over the 1982–1985 period, employment in New Jersey's travel-related industries increased by 46 thousand, or 27.3 percent. The rate of growth in travel-related employment far surpassed the State's overall employment growth (10.4%), and travel and tourism contributed significantly to the booming New Jersey economy during those years.

VIII

FINANCE, INSURANCE AND REAL ESTATE

VIII

FINANCE, INSURANCE AND REAL ESTATE

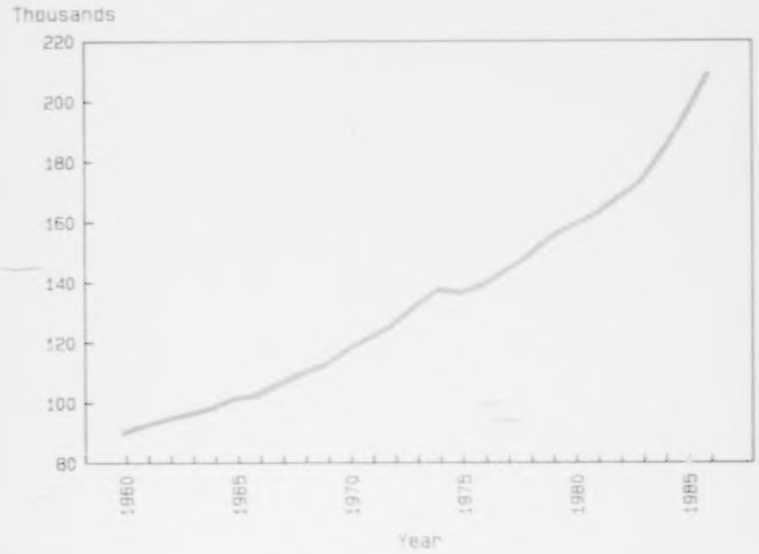
Introduction

Finance, Insurance and Real Estate (FIRE) are becoming ever more important to New Jersey's economy. The decline in the State's manufacturing sector is being made up by gains in the service-producing sector, and FIRE contributes significantly to overall services growth. This has helped bring sectoral composition in the State to near equality with that of the nation, leaving the State less prone than before to business cycle swings.

Employment Growth

Figure 8.1 shows employment in the Finance, Insurance and Real Estate sector from 1980 to 1986. The graph curves sharply upward in recent years illustrating rates of growth exceeding those of previous years.

FIGURE 8.1
FINANCE, INSURANCE AND REAL ESTATE EMPLOYMENT
New Jersey, 1960–1986



Source: (55)

New Jersey's FIRE employment growth history documents a sector which lagged its United States counterpart over the 1960-1980 time span. New Jersey's annual growth rates averaged about three percent during that twenty year period compared to the nation's 3.4 percent rate. Since 1960, however, the State's rate of growth jumped to 4.8 percent per year while the U.S. growth rate simply equaled that of its earlier period. Table 8.1 shows the State's shift from a somewhat slow to very rapid growth rate.

Table 8.1
Employment Growth in the Finance, Insurance, and Real Estate Sector 1960–1986

	Employment (000)			Average Annual Growth Rate	
	1960	1980	1986	1960–80	1980–86
United States	2,629	5,160	6,297	3.43	3.37
New Jersey	88.0	158.1	208.9	2.97	4.75

Sources: (21) and (55)

Not only has New Jersey FIRE employment outpaced the U.S. in recent years, but it has also far exceeded the Northeastern states and, by a smaller margin, the South Atlantic Region. New Jersey's 1982-86 growth of 5.74 percent per annum surpassed the 3.80 percent United States rate, the South Atlantic Region rate of 4.91 percent and the rates for other eastern states (Table 8.2).

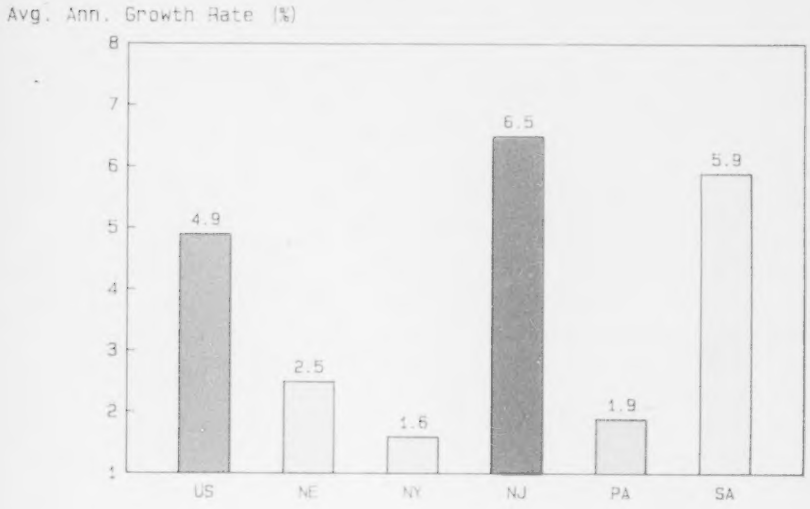
Table 8.2
Employment in Finance, Insurance and Real Estate 1982–1986

	Thousands		Average Annual Growth Rate (%)
	1982	1986	
United States	5,431.0	6,304.0	3.80
New England	350.6	423.3	4.82
New York	670.6	740.9	2.52
New Jersey	167.1	208.9	5.74
Pennsylvania	239.6	272.7	3.29
South Atlantic	778.0	942.6	4.91

*South Atlantic totals do not include District of Columbia.
Sources: (21) and (55)

Figure 8.2 depicts the 1983–86 average annual growth rates for the region. New Jersey's paramount position is seen clearly when juxtaposed with the U.S. and eastern United States.

FIGURE 8.2
EMPLOYMENT IN FINANCE, INSURANCE AND REAL ESTATE
1983–1986



Source: (55)

1. FINANCE

New Jersey's large financial sector serves the State's 7.6 million residents, as well as the State's thriving business sector. Table 8.3 presents a breakdown of the number and total assets of each kind of financial institution in the New Jersey economy.

Table 8.3
New Jersey Financial Sector
Number and Total Assets
1982 and 1986

	Number of Institutions		Total Assets ($ million)	
	1982	1986	1982	1986
Banks (Commercial, State and Federal)	148	129	42,224	70,190
Savings Banks	26	15	10,808	13,236
Insured Savings and Loan Associations	145	139	17,629	50,175
Secondary Mortgage Licensees	436	494	867	1,912
Small Loan Licensees	218	203	567	1,056
Insurance Premiums, Finance Companies	74	73	96	471
Pawn Brokers	22	13	6	6
Credit Unions	54	38	130	151
TOTAL	1,123	1,104	72,327	137,197

Source: (6)

In 1986, New Jersey had a total of 1,104 financial institutions, down slightly from the 1982 total of 1,123. The biggest percentage decline is in savings banks, down from 26 to 15.

Despite the smaller number of institutions overall, assets have almost doubled from $72.1 billion in 1982 to $137.2 billion in 1986 for an average annual gain of 17.4 percent. Insured Savings and Loan Associations and Banks have led the way with average annual rates of increase of 29.9 percent and 13.5 percent respectively (Table 8.4). This remarkable growth has increased New Jersey's commercial banks' share of U.S. assets from 1.76 percent in 1982 to 2.38 percent in 1986. The new level, while a notable improvement, still falls short of either the State's share of U.S. population (3.16%) or the State's share of personal income nationwide (4.02%).

Also of great import is the increase in deposits. Between 1982 and 1986 the average annual growth rate of deposits in New Jersey was 14.2 percent as compared to 7.5 percent for the United States and New Jersey's relative share of total U.S. deposits increased by 0.55 percentage points, from 2.05 to 2.61 percent, again less than either the State's population or income share.

Table 8.4
Commercial Bank Assets and Deposits, New Jersey and the United States 1982-1986
(million $)

Deposits	1982	1986	Total Increase (%)	Average Annual Increase (%)
United States	$1,707,231.4	$2,282,388.0	33.7%	7.5%
New Jersey	35,045.3	59,560.3	70.0	14.2
N.J. Share of U.S.	2.05%	2.61%	—	—
Assets				
United States	2,405,044.1	2,943,457.9	22.4	5.2
New Jersey	42,224.2	70,190.3	66.2	13.5
N.J. Share of U.S.	1.76%	2.38%	—	—

Source: (6)

2. INSURANCE

Insurance Companies

The number of insurance companies which make New Jersey their home has increased from 60 in 1981 to 87 in 1985—an increase of 45 percent (Table 8.5) Fire and casualty companies were responsible for almost all of the increase, nearly doubling in number. The number of life insurance companies decreased from 17 to 14.

Table 8.5
Insurance Companies Domiciled in New Jersey, 1981 and 1985*

	1981	1985
Fire and Casualty	29	57
Life	17	14
Fraternal Benefit Society	6	6
Medical	2	2
Hospital Service Corporations	2	2
Dental Service Corporations	1	3
Title Insurance	3	3
TOTAL	60	87

*Companies with headquarters in New Jersey.
Source: (20)

Insurance Coverage

In 1985, there were 998 insurance companies offering coverage in New Jersey. Over half (52.1%) of these companies were fire and casualty companies and 37 percent were life insurance companies (Table 8.6).

Table 8.6
Insurance Companies Licensed in New Jersey, 1985

	Companies Operating	Percent of Total
Fire and Casualty	520	52.1
Life	368	36.9
Fraternal Benefit Society	67	6.7
Medical	2	.2
Hospital Service Corporation	2	.2
Dental Service Corporation	3	.3
Title Insurance	22	2.2
Mortgage Guarantee	13	1.3
Investment Association	1	1
TOTAL	998	100

Source: (1)

Table 8.7 shows the number and face value of life insurance policies in force in 1985 for New York, New Jersey and Pennsylvania and the United States as well as the value of life insurance per policy for the same year.

As is seen, the average face value per policy in New Jersey is considerably higher than in New York or Pennsylvania and is $3,739 higher than the national average. Insurance per family tells a similar story: New Jersey's figure exceeds those of New York or Pennsylvania, and is $14,300 higher than the United States overall.

Table 8.7
Life Insurance in Force
United States and Mid-Atlantic Region, 1985

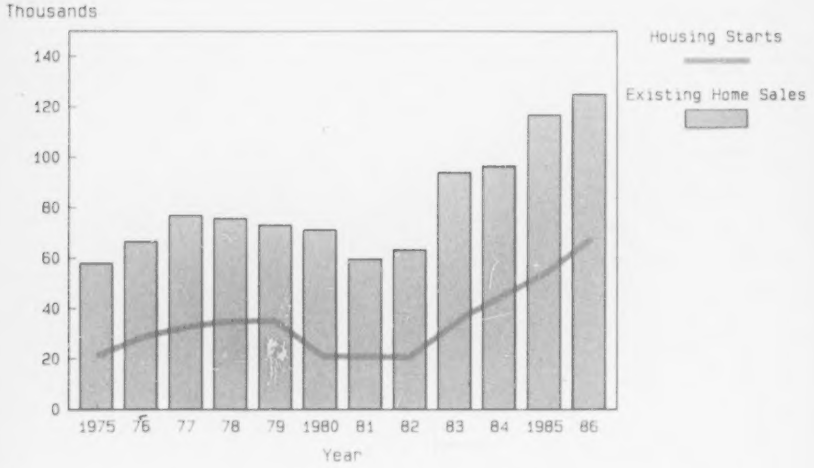
	Total Face Value ($ billion)	Policies (thousands)	Value Per Policy ($)	Average Value Per Family ($)
United States	6,053	386,198	15,673	63,400
New York	473	25,865	18,287	66,300
New Jersey	226	11,642	19,412	77,700
Pennsylvania	290	21,848	13,273	62,100

Source: (1)

3. REAL ESTATE

Housing starts and existing home sales over the period 1975 to 1986 fluctuated widely with the low points in 1975 and the 1981–82 recession. Sales in 1982 failed to rebound fully because of extraordinarily high interest rates (see Figure 8.3).

FIGURE 8.3
NEW JERSEY HOUSING STARTS AND EXISTING HOME SALES
1975–1986



Source: (31)

Table 8.8 shows the growth in the four basic categories of property sales between 1981 and 1986. Vacant land sales grew most rapidly at 11.5 percent.

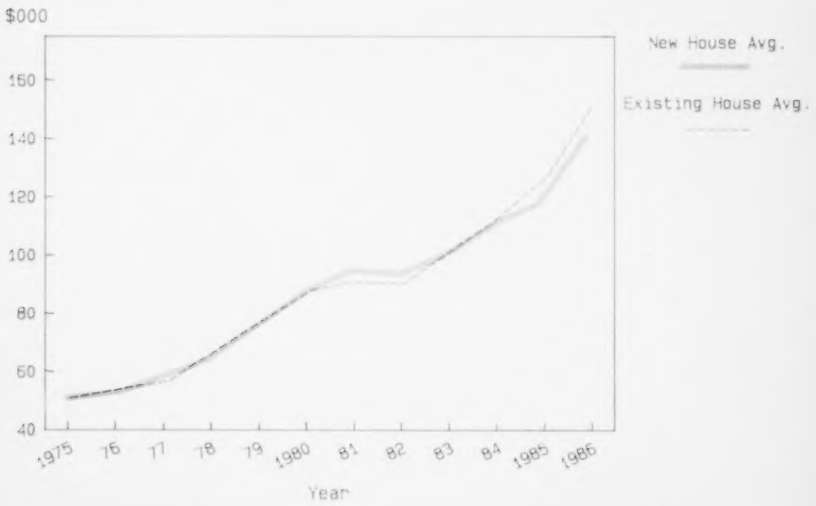
Table 8.8
New Jersey Real Estate Sector Sales, 1981-1986

Property Sales	Number of Sales 1981	Number of Sales 1986	Average Annual Change (%)	1986 Aggregate Selling Price ($000)
Residential	59,929	95,126	9.68	$11,069,541
Business	3,893	6,152	9.58	1,861,254
Vacant Land	5,479	9,455	11.53	516,111
Farm	81	106	5.53	15,297
Total	69,382	110,839	9.82	13,462,203

Source: (31)

As can be seen from Figure 8.4, prices of residential property have nearly tripled over the past eleven years.

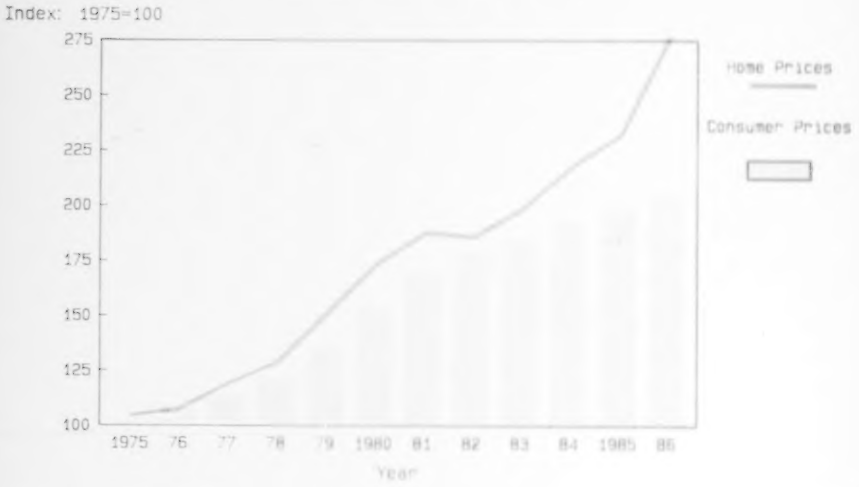
FIGURE 8.4
AVERAGE SELLING PRICE OF SINGLE FAMILY HOUSING
New Jersey, 1975–1986



Source: (31)

From 1975 to 1978 home prices grew at approximately the rate of inflation; subsequent to 1986 they grew generally faster (Figure 8.4). Relative prices of homes have fluctuated with mortgage markets, the availability of funds, interest rates and inflation expectations (Figure 8.5).

FIGURE 8.5
AVERAGE NEW HOME PRICES COMPARED TO CONSUMER PRICE INDEX, 1975–1986



Sources: (31) and (57)

IX

EDUCATION AND CULTURE

IX

EDUCATION AND CULTURE

1. EDUCATION

New Jersey's public schools and universities continue to gain in quality, and the State's major universities earning increasing national and international recognition. The growth and diversity of its cultural offerings add to the State's other attractions to make it an excellent place for people to live and raise families.

Elementary and Secondary School Enrollment

Public School Enrollment

The State's public school enrollment has declined steadily since the peak year of 1972–73 (Figure 9.1). Between the 1983-84 school year and the 1986–87 school year, public school enrollment has remained at slightly above 1.1 million. During the next three years, it may drop even below that level, but afterwards, according to demographic projections, it will probably increase again. Enrollment trends in local districts and counties do not necessarily follow statewide trends, as conditions which influence enrollments may vary.

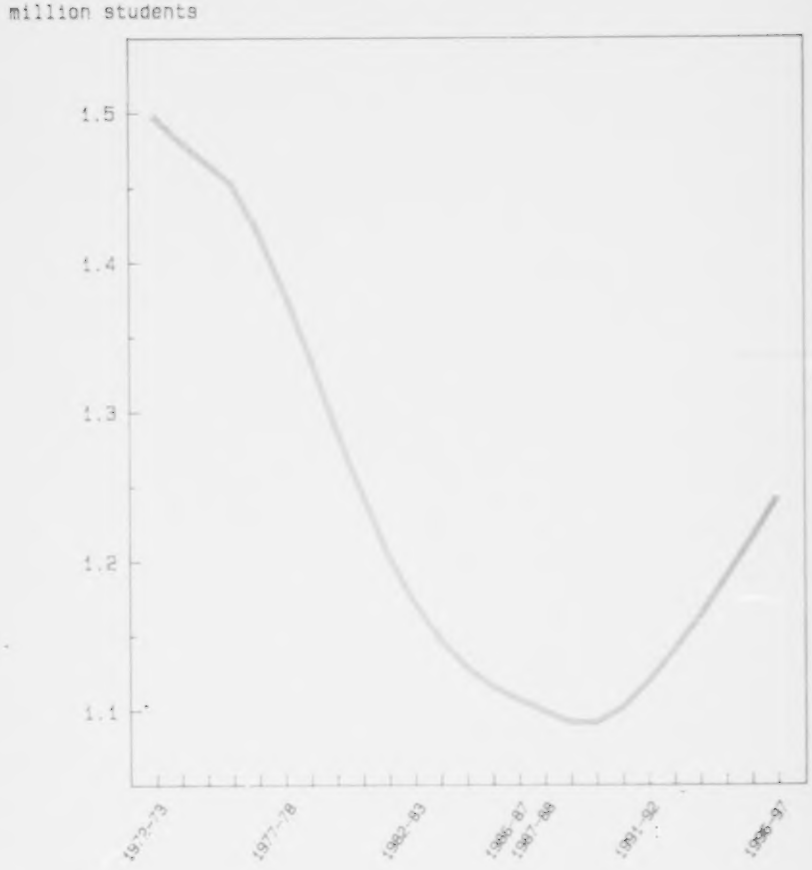
Private School Enrollment

Table 9.1 gives the shares of total elementary and secondary students attending private schools between 1970 and 1980 for the United States, the Middle Atlantic states and the New England and South Atlantic regions. With the exception of the South Atlantic, all of the above-mentioned areas and the United States as a whole experienced a decline, with New Jersey showing the largest decline of the three Middle Atlantic states — from 17.7 percent in 1970 to 15.8 percent in 1980.

Racial Composition

As shown in Figure 9.2, whites showed the biggest change in public school enrollment among the listed racial categories, a 2.8 percentage point decrease from 1981 to 1986. Hispanics showed the biggest increase with a 1.4 percent increase between 1981 and 1986.

FIGURE 9.1
NEW JERSEY PUBLIC SCHOOLS ENROLLMENT
Actual and Projected, 1972–1997



Sources: (12), (13) and (53)

Dropout Rates

Table 9.2 illustrates the dropout rate as a percentage of enrollment for the 1985-86 school year for the 21 New Jersey counties. The rates ranged

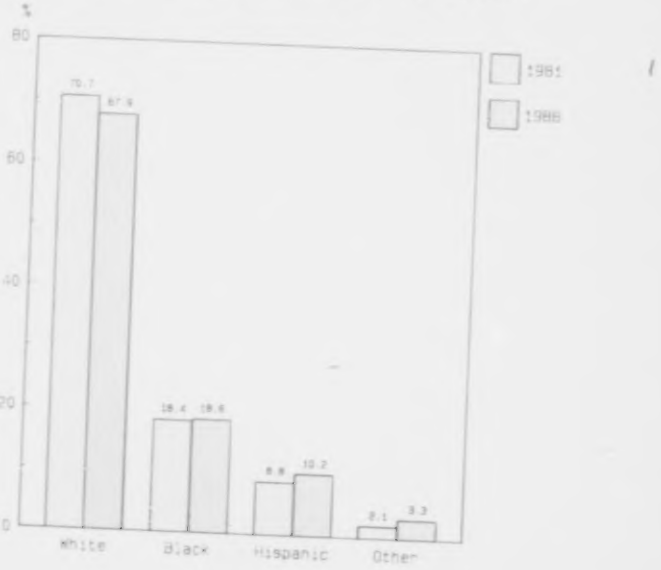
from a high of 2.5 percent in Passaic County to a low of 0.9 percent in Bergen and Somerset, exhibiting no identifiable geographic pattern. The statewide average was 1.6 percent.

Table 9.1
Percent of Elementary and Secondary Students Attending Private Schools

	1970	1980
United States	11.3	10.9
New England	15.1	12.3
New York	18.3	16.9
New Jersey	17.7	15.8
Pennsylvania	18.6	17.6
South Atlantic	7.5	8.7

Source: (53)

FIGURE 9.2
PERCENT OF PUBLIC SCHOOL ENROLLMENT IN NEW JERSEY, BY RACE/ETHNIC GROUPS



Source: (13)

Table 9.2
Dropouts as Percent of Enrollment
September 1985 to August 1986

Atlantic	2.3	Middlesex	1.4
Bergen	0.9	Monmouth	1.6
Burlington	1.2	Morris	1.0
Camden	1.4	Ocean	1.9
Cape May	1.9	Passaic	2.5
Cumberland	2.3	Salem	2.1
Essex	1.8	Somerset	0.9
Gloucester	1.3	Sussex	1.1
Hudson	2.3	Union	1.8
Hunterdon	1.2	Warren	1.6
Mercer	2.2		
		STATE	1.6

Source: (12)

Over a longer period, and focused on the highest four grades in the urban districts, the picture looks rather different (Table 9.3).

Table 9.3
Dropout Rates for New Jersey
56 Urban School Districts and Selected Cities

	9th Grade Enrollment 1982	Dropout 1983–1986	Dropout Rate in Percent
New Jersey Total	99,244	15,633	15.8
56 Urban Districts	34,472	8,612	25.0
Newark City	5,132	1,254	24.4
Camden City	1,342	328	24.4
Atlantic City	698	171	24.5
Neptune Twp.	478	118	24.7
Hoboken City	477	133	27.9
Bridgeton City	346	104	30.1
Elizabeth City	1,177	366	31.1
Long Branch City	355	112	31.5
Passaic City	814	258	31.7
Jersey City	2,556	849	33.2
Perth Amboy City	492	191	38.8
Trenton City	1,010	468	46.3
New Brunswick City	218	111	50.9
Paterson City	1,560	889	56.9

Source: (13)

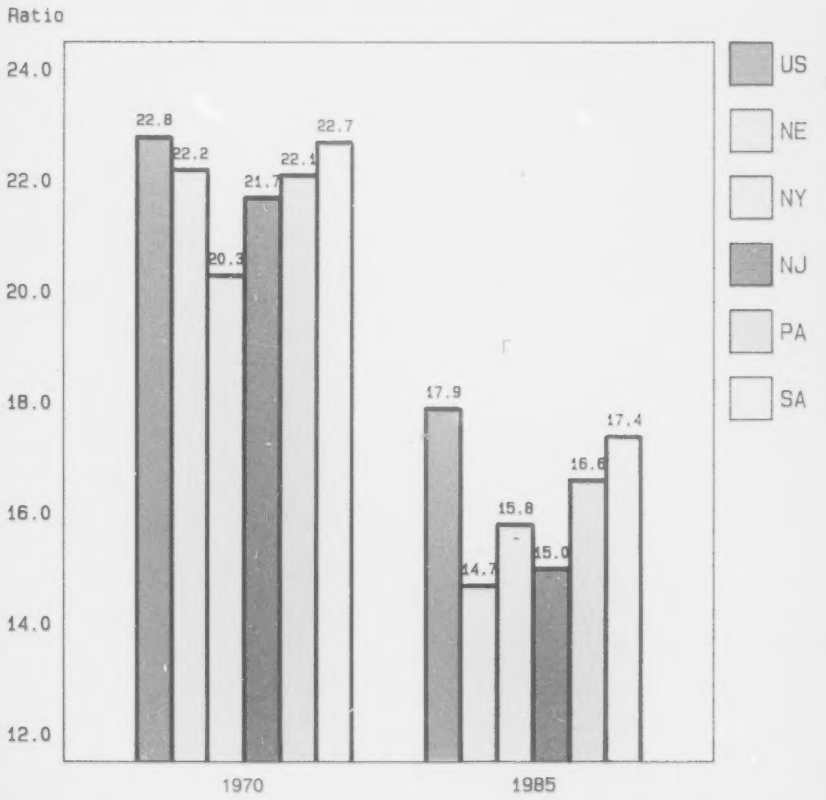
Instructional Quality

Although instructional quality is difficult to measure, certain indicators are useful, including faculty and staff members per pupil and educational attainment of the faculty.

Student-Teacher Ratios

Figure 9.3 graphs the pupil/teacher ratio for the United States, the Middle Atlantic states, the New England and South Atlantic regions for 1970, and 1985.

FIGURE 9.3
PUBLIC ELEMENTARY AND SECONDARY SCHOOLS
PUPILS PER TEACHER, 1970–1985



Sources: (13) and (53)

Between 1970 and 1985, the pupil/teacher ratio in New Jersey decreased from 21.7 to 15 — a decline of over 30 percent, exceeding the nationwide decline of 21.5 percent as it went from 22.8 in 1970 to 17.9 in 1985. New Jersey's ratio of 15 pupils per teacher in 1985 was among the lowest in the nation.

Highest Degrees of Public School Educators

Table 9.4 shows educational attainment of faculty in the public schools of New Jersey. By the end of September 1986, 99.7 percent of the administrators and supervisors had degrees; more than 84 percent master's and 11 percent doctor's. Compared to 1982, there was a slight decline in master's (from 84.9% to 84.2%) more than offset by the increase in doctor's degrees.

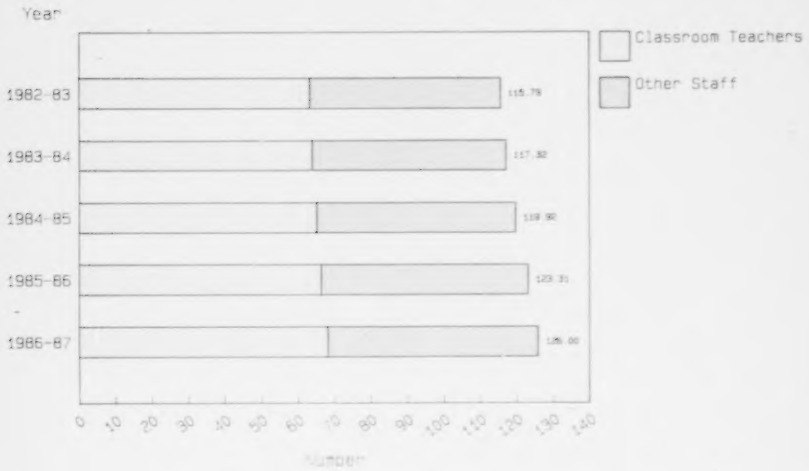
Table 9.4
Credentials of Public School Educators in New Jersey, September 30, 1986

	Highest Degree Held (%)				
	None	Bachelor's	Master's	Doctor's	Other
Supervisors	0.3	3.6	84.2	11.4	0.5
Classroom Teachers	1.0	62.8	35.5	0.6	0.1
Special Services	1.5	34.4	60.7	2.9	0.5

Source: (13)

Over 63 percent of educational support services personnel and 36 percent of classroom teachers had master's or doctor's degrees. Of course, teachers account for almost 80 percent of certificated staff, administrators less than eight percent (Figure 9.4). On the whole, between the school years 1982-83 and 1986-87, the numbers of people with none or unspecified degree declined by almost 19 percent, while the number of doctorate holders increased by almost 29 percent to 1,731 persons.

FIGURE 9.4
NEW JERSEY TOTAL FULL TIME STAFF AND CLASSROOM TEACHERS
per Thousand Students, 1982–83 to 1986–87



Source: (10)

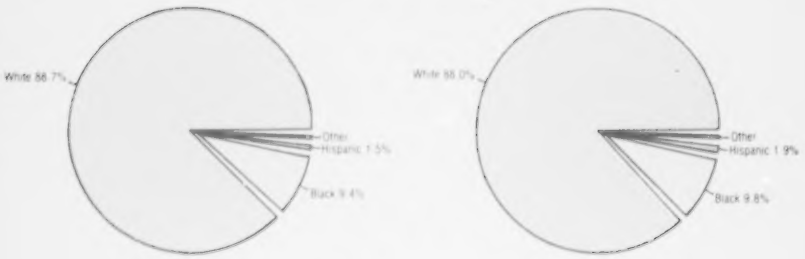
As for racial/ethnic distribution, the number of minorities employed in full-time certificated staff positions increased by almost 10 percent and in full-time non-certificated positions by 20 percent between the school years 1982-83 and 1986-87, while the overall increase of employment in this period was 2.8 percent. The share of white employees in both categories together declined below 85 percent; the share of black employees increased above 12, and the Hispanic share reached 2.5 percent (Figure 9.5).

Proficiency Tests

Beginning in the 1985-86 school year, a passing grade on the High School Proficiency Test was required for a student in the New Jersey school system to receive a high school diploma. Table 9.5 illustrates the results of the tests administered during 1986 and 1987.

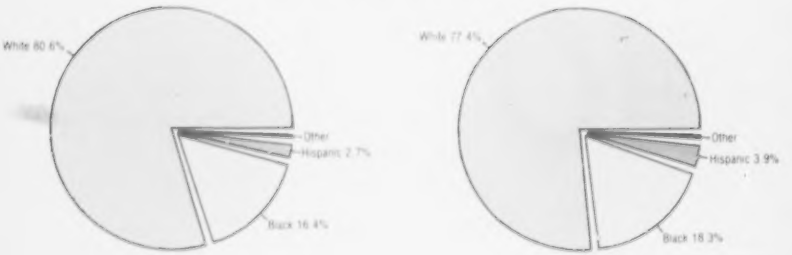
FIGURE 9.5
RACIAL/ETHNIC DISTRIBUTION OF STAFFS IN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS IN NEW JERSEY

CERTIFICATED



1982-83 1986-87

NON-CERTIFICATED



1982–83 1986–87

Source: (13)

Statewide, the percent passing for 1987 was 91.0 percent in reading, 77.0 percent in mathematics, and 85.9 percent in writing. The number of grade nine students who passed all three sections of the test in 1987 was 52,460 (70.6%); in 1986, the number was 49,461 (61.5%). Compared to last year, this represents an increase of 9.1 percentage points.

Table 9.5
1986–87 High School Proficiency Test Results—Grade 9

Test	Number Tested 1987*	Number At Or Above State Standard 1987	Percent At Or Above State Standard 1987	Percent At Or Above State Standard 1986	Mean Scores 1987	Mean Scores 1986	Change In Mean Score 87–86
Reading	73,378	66,765	91.0	82.6	88.3	85.0	+3.3
Math	80,511	56,834	77.0	71.8	74.3	71.6	+2.7
Writing**	80,393	63,065	85.9	76.5	24.7	82.2	+2.5

*Excludes special education and limited English-speaking students, and voided answer documents.
**This number represents only those students who completed both the essay and multiple choice portions of the writing test.
Source: (13)

Finance and Expenditures

In 1984-85, New Jersey's current expenditures for public elementary and secondary education averaged $4,160 per pupil, almost 30 percent above the national average of $3,204. Among those spending more per pupil were New York with $4,793 and only one state in New England, Connecticut, with $4,524. No state in the South Atlantic region spent more (Table 9.6).

Table 9.6
Current Expenditures for Public Elementary and Secondary Schools
1984-1985

	Total ($000)	Per Pupil ($)	As Percent of Personal Income
United States	125,886,968	3,204	4.1
New England	7,168,257	3,743	3.8
New York	12,681,301	4,793	4.8
New Jersey	4,697,534	4,160	3.8
Pennsylvania	6,660,369	3,914	4.4
South Atlantic	18,569,868	2,875	3.8

Source: (53)

Nationwide, the expenditures represented over four percent of total personal income; in Pennsylvania, almost 4.4 percent and in New York, 4.8 percent. New Jersey, with 3.8 percent, was on the same level as in the New England and the South Atlantic regions.

Sources of Revenues

Between the 1980-81 and 1984-85 school years, the share of New Jersey's public elementary and secondary school revenues received from the federal government increased from 3.42 to 4.54 percent. The share of receipts from the state government increased from 33.53 to 40.72 percent, while the share of revenues from local and other sources decreased from 63.05 to 54.74 percent. The State's composition of revenue sources is similar to that of New York and New England. For the United State as a whole, the share in 1984-85 were 6.52, 48.77 and 44.71 percent, respectively (Table 9.7).

Table 9.7
Sources of School Revenues, 1984–85

	Total (million $)	Federal (%)	State (%)	Local and Other (%)
United States	137,351	6.52	48.77	44.71
New England	7,563	4.91	39.52	55.57
New York	13,296	5.01	41.25	53.74
New Jersey	5,519	4.54	40.72	54.74
Pennsylvania	7,314	4.57	45.98	49.45
South Atlantic	20,448	7.91	50.80	41.29

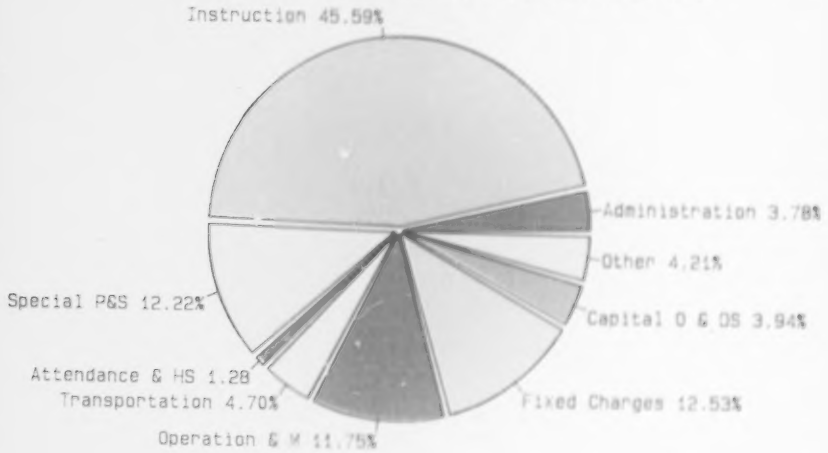
Source: (53)

The share of local and other sources (apart from federal and state) in 1984-85 amounted to, on the average, $1,563 per pupil in the United States, $2,675 per pupil in New Jersey, a little over $2,700 per pupil in New York. In New England this share amounted to $2,194 and in the South Atlantic region, $1,307 per pupil.

School Expenditures

For the 1985-86 school year, of the total expenditures for New Jersey's elementary and secondary schools, almost $5.7 billion, 45.99 percent went directly to instruction; 12.22 percent to special projects and special schools, which also includes mostly instruction; and 3.78 percent to administration (Figure 9.6).

FIGURE 9.6
EXPENDITURES FOR NEW JERSEY PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, 1985–1986



Total almost $5.7 Billion

Source: (13)

Attendance and Health Services claimed 1.28 percent of the total expenditures, Transportation 4.70 percent, and Operation and Maintenance 11.75 percent. Fixed charges represented 12.53 percent, capital outlay and debt service 3.94 percent, and the rest (4.21%) included additional state school building aid, improvement authorizations, food services, student body activities and community services.

School Finance

Local property taxes are the main source of revenues for primary and secondary education. Equalized property valuations per pupil vary due to differences in both property values and enrollments. In 1986, Cape May County's average equalized valuation per pupil was $601,902, while Cumberland County's was $93,049 per pupil (Table 9.8). This means that in order for Cumberland County to produce the same revenue per pupil as Cape May, its tax levy would have to be more than six times as high as Cape May.

Table 9.8
Pubic School Enrollment and Equalized Valuations by County, 1986

County	Enrollment	Average Equalized Valuation/Pupil ($)
Atlantic	31,025	392,589
Bergen	102,094	477,748
Burlington	61,537	157,833
Camden	79,833	134,250
Cape May	12,296	601,902
Cumberland	25,007	93,049
Essex	123,851	178,287
Gloucester	36,367	138,272
Hudson	68,449	176,637
Hunterdon	16,819	284,905
Mercer	44,052	226,291
Middlesex	84,463	291,576
Monmouth	83,199	255,379
Morris	64,197	382,188
Ocean	60,714	292,050
Passaic	66,139	209,311
Salem	11,978	119,169
Somerset	30,432	396,116
Sussex	23,973	187,932
Union	66,131	306,880
Warren	14,911	187,503
STATE	1,107,467	260,176

Source: (13)

There are also differences in expenditures per pupil throughout the State. An example of these differences can be seen in one county's cities. For 1987-88, North Hanover's budgeted expenditures per pupil was $3,582, while Interlaken's was $11,666 per pupil, more than three times North Hanover's expenditures (Table 9.9).

Table 9.9
Per Pupil Property Wealth and Expenditures
Selected Districts, 1987–88

	Averaged Equalized Valuation Per Pupil ($)	Total Budgeted Expenditures Per Pupil ($)
Low Wealth Districts		
Winfield (Union)	35,702	7,678
Camden City (Camden)	38,014	4,675
North Hanover (Burlington)	39,916	3,582
Newark (Essex)	65,911	6,490
Lakehurst (Ocean)	71,195	5,305
High Wealth Districts		
Mantoloking (Ocean)	27,709,364	11,532
Interlaken (Monmouth)	9,308,818	11,666
Stone Harbor (Cape May)	7,231,557	8,535
Longport (Atlantic)	5,330,989	7,338

Source: (13)

Apparently there is a strong correlation between property valuation and per pupil expenditures in New Jersey. North Hanover's equalized valuation per pupil for 1987-88 was $39,916, while Interlaken's was $9,308,818.

Higher Education

Higher education is more important than ever for today's high technology-oriented economy and for young people preparing to enter the job market. Higher education institutions are introducing new and more diversified curricula in order to meet the needs of the students and prospective employers.

New Jersey's higher education system includes Rutgers-the State University, the University of Medicine and Dentistry of New Jersey (UMDNJ); the New Jersey Institute of Technology (NJIT); nine state colleges; nineteen county colleges; and twenty-nine independent colleges and universities.

Higher Education Enrollments

The composition of the almost 300 thousand full-time and part-time students enrolled in 1986-87 is shown in Table 9.10. As in the previous school year, 54.1 percent of the total number were women; interpretation of data by race/ethnicity has to take into account the statistical problems involved.

Table 9.10
Total* Headcount Enrollment in New Jersey Colleges and Universities by Sex and by Ethnicity**

	Fall 1978		Fall 1985		Fall 1986	
	#	%	#	%	#	%
Men	148,837	48.4	136,678	45.9	136,607	45.9
Women	158,374	51.6	160,977	54.1	161,149	54.1
Blacks	31,409	10.2	27,346	9.2	26,136	8.8
Hispanics	11,342	3.7	16,833	5.7	16,541	5.5
Whites/Others	264,460	86.1	253,476	85.1	236,193	79.3
"Unknown"	—	—	—	—	18,886	6.3
TOTAL	307,211	100.0	297,655	100.0	297,756	100.0

*Includes both full-and part-time students, at both undergraduate and post-baccalaureate levels.
**Fall 1986 data by race/ethnicity are not comparable with previous years. Prior to fall 1986, colleges reported enrollments on Higher Education General Information Survey (HEGIS) forms, which required accounting for all students by racial/ethnic category. (The survey called for estimates if exact counts for a category were not available.) In fall 1986, the federal government introduced a new data reporting system, the Integrated Post-secondary Education Data system (IPEDS), which does not carry such a requirement. With IPEDS, it is possible for a student to be included in a college's total enrollment but not be counted in any racial/ethnic category. Therefore, if there are students whose race/ethnicity is unknown, the numbers reported by a college in any given category could be lower than they would be under the HEGIS system, depending on the method of allocating unknowns the college employed in previous years.
Source: (18)

Of the total New Jersey enrollment in the fall of 1985, almost 80 percent went to public institutions, nearly three percentage points more than in 1980. For the same period, this share increased in the South Atlantic from 77.9 to 79.2 percent, while it decreased for the United States as a whole from 78.2 to 77.4 percent, in Pennsylvania from 57.6 to 56.4 percent, in New

Table 9.11
Distribution of Enrollment in Public and Private Institutions of Higher Education Fall 1985

	Enrollment (000)	Public Percent	Private Percent
United States	12,247	77.4	22.6
New England	786	50.7	49.3
New York	1,000	56.3	43.7
New Jersey	298	79.7	20.3
Pennsylvania	533	56.4	43.6
South Atlantic	1,819	79.2	20.8

Source: (53)

York from 56.8 to 56.3. In New England, the share of enrollment in public institutions slightly declined to below 51 percent, leaving nearly half to the private institutions.

Degrees Awarded

New Jersey's institutions of higher education awarded 43 thousand degrees in 1985-86, almost 55 percent of which were bachelor's degrees (Figure 9.7). A considerable increase (30%) over eight years is shown in first-professional degrees including degrees in law, medicine, dentistry and the theological professions (Table 9.12).

FIGURE 9.7
DEGREES GRANTED BY NEW JERSEY'S COLLEGES AND UNIVERSITIES

Source: (18)

Educational Levels of the Population

As Table 9.13 shows, 67.8 percent of New Jersey's 1980 population, twenty-five years and older, were high school graduates. This was higher than the United States figure which was 66.3 percent (later revised to 66.5%), but lower than New England where high school graduates constituted 70.7 percent of its population.

Table 9.12
Total Degrees Conferred in New Jersey Colleges and Universities
By Type of Degree

	F.Y. 1977–78	F.Y. 1984–85	F.Y. 1985–86
Sub-Associate	868	1,059	783
Associate	9,911	10,675	10,126
Bachelor's	23,454	25,086	23,765
Master's	8,130	6,547	6,320
Doctorate	713	690	677
First-Professional	1,364	1,743	1,772
TOTAL	47,027	43,654	43,002

Source: (18)

A total of 18.6 percent of New Jersey's 1980 population, twenty-five years and older, has completed four or more years of college. This figure was roughly the same as in New York, considerably higher than in Pennsylvania, and the United States, but somewhat lower than in New England.

Table 9.13
Schooling and Educational Attainment for Population
Twenty-Five Years and Older, 1980

	Percent of High School Graduates	Percent with Four or More Years of College
United States	66.5	16.3
New England	70.7	19.3
New York	66.2	18.7
New Jersey	67.8	18.6
Pennsylvania	64.5	13.8
South Atlantic	61.6	15.8

Source: (10) and (18)

2. CULTURE*

New Jersey is home for more than 47,000 professional artists, eighth highest among all states and third behind New York and California in artists per capita. Well over 1,000 arts organizations actively provide channels for

*This section is based on information from New Jersey State Council on the Arts.

these artists, offering a vast array of public programs for New Jerseyans, and expended over $105.6 million on arts programming in 1985.

Public Sector Support

Public support for the arts is an integral part of an overall strategy to improve the quality of New Jersey life. State funding for the arts has increased from $3 million in FY 1982 to $19.8 million in FY 1988, with an additional $40 million approved by voters for capital improvements to cultural centers.

Fiscal Year 1987 grants and fellowships helped fund over 10,000 high-quality arts performances, exhibitions, and broadcasts heard and/or seen by 13.5 million persons, and helped leverage 86.4 million (five times the public investment) in private-sector support. In addition, 375 local arts groups received funding from their respective county arts agencies through the NJSCA state/county partnership block grants.

In FY 1988 the NJSCA will provide close to $19.1 million to support the efforts of artists and cultural organizations throughout the State. This figure includes $13.3 million in grants to 187 arts organizations and $778,000 in fellowships to 105 New Jersey artists.

Since 1978, the State of New Jersey has acquired through commission and purchase more than $2 million worth of visual art — sculptures, photographs, paintings and crafts to be placed in or near new state buildings.

Private Sector Support

New Jersey's private sector has also contributed to cultural development through organizations like Business Volunteers for the Arts, Volunteer Lawyers for the Arts, and with the growing number of corporate art collections and art galleries (such as the Squibb and Nabisco galleries) and increased corporate funding for special arts programming (AT&T, Rouse, Mobil and others). Foundation support has boosted major New Jersey arts groups. The Annual Governor's Tennis Tournament, initiated in 1982, also engaged businesses and corporations to benefit the arts.

Performing Arts

Two professional performing arts networks contribute to the growth and stability of professional dance and theatre companies. The New Jersey Theatre Groups, begun in 1978, now numbers 12 professional troupes. The New Jersey Dance Alliance, barely one year old, boasts 200 members, among them choreographers, dancers, and professional dance companies. Among the State's premiere dance groups are The New Jersey Ballet and The Garden State Ballet.

New Jersey's diverse music scene is shared by symphony orchestras,

chamber and jazz ensembles, opera and choral groups. American Boychoir School, Newark Boys Chorus School and Westminster Choir College are located in the State. Important orchestras like the New Jersey Symphony, Garden State Symphony Orchestra, and South Jersey Symphony Orchestra, together with a dozen regional and chamber orchestras and ensembles, give evidence of a thriving classical music scene. Opera and musical theatre likewise thrive, with the New Jersey State Opera and the Paper Mill Playhouse as the standard bearer.

Literature

On the literary front, public funds provide numerous fellowships to poets, fiction writers, playwrights and translators. Also, public and foundation funds (Geraldine R. Dodge Foundation) produced, in 1987 and 1988, state-wide poetry festivals.

X

GOVERNMENT

X

GOVERNMENT

New Jersey's state and local governments were staffed by 361,000 full-time equivalent employees in 1984. Government employment experienced a 2.2 percent average annual increase between 1970 and 1984 (Table 10.1). The highest employment growth was registered by welfare services where the average annual growth rate was 5.1 percent. Welfare service employment as a share of total state and local government employment increased from 2.7 percent in 1970 to 4.0 percent in 1984 (Figure 10.1). Highway-related employment experienced the slowest growth, 0.7 percent annual average, and its share dropped to 5.1 percent from 6.2 percent. Almost one half (48.5%) of government employment was in education and the employment growth of this function was the same as that of the total.

Table 10.1
New Jersey State and Local Government Employment by Function

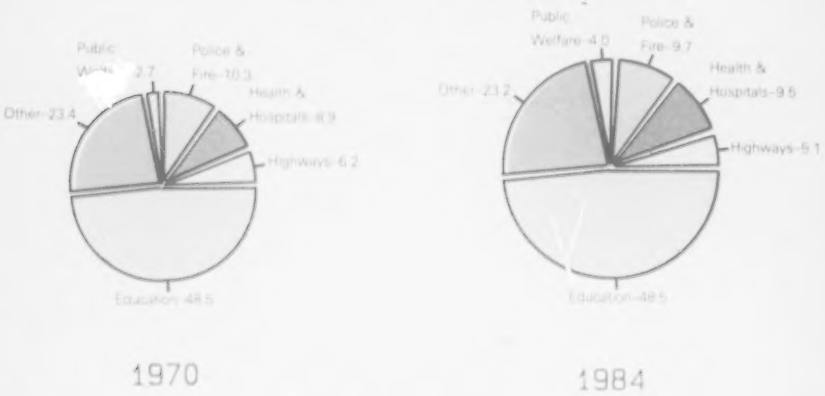
	Full-Time Equivalent			Average Annual Change
	1970	1980	1984	1970–84 (%)
Education	129.7	175.6	175.0	2.2
Health & Hospital	23.9	35.5	34.2	2.6
Highways	16.7	19.2	18.5	0.7
Police & Fire	27.6	36.1	34.9	1.7
Public Welfare	7.3	14.4	14.6	5.1
Other	62.6	89.2	83.8	2.1
Total	267.8	370.0	361.0	2.2

Source: (48)

A comparison of New Jersey's government employment (per 1,000 population) with the United States average as well as those for neighboring states shows some interesting facts:

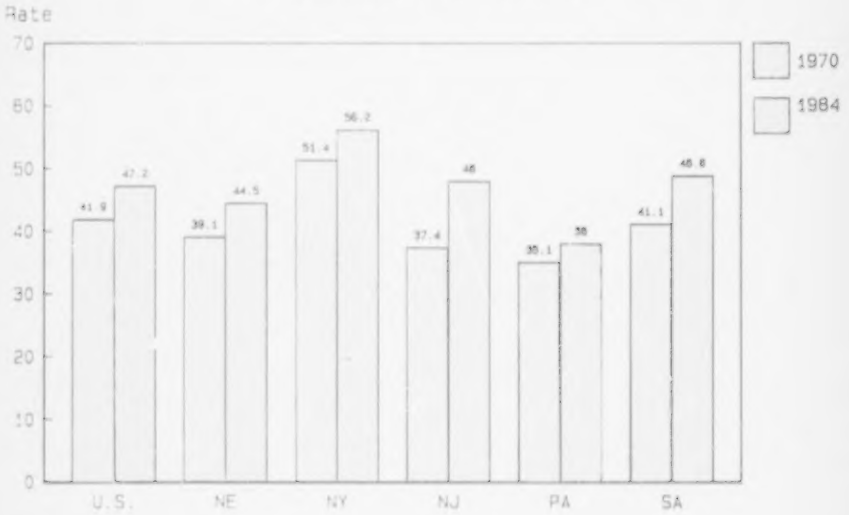
In 1970, New Jersey's government employment was relatively small with 37.4 state and local full-time equivalent employees per 1,000 population (Figure 10.2), compared to the respective figure for state and local government in the United States (41.9). By 1984, state and local government employment in New Jersey increased to 48.0 per 1,000 population, slightly exceeding that of the United States (47.2). New Jersey's government employment is still significantly lower than to New York's 56.2 per 1,000

FIGURE 10.1
NEW JERSEY STATE AND LOCAL GOVERNMENT EMPLOYMENT BY FUNCTION, 1970–1984



Source: (48)

FIGURE 10.2
STATE AND LOCAL GOVERNMENT EMPLOYMENT, 1970 AND 1984
Employment per 1000 Population



Source: (48)

population but close to the South Atlantic's 48.8. It is, however, higher than those of Pennsylvania (38.0) and New England (44.5) (Figure 10.2).

In 1981 there were 1,618 local governments in New Jersey. These included 567 municipalities, 21 counties and 587 school districts, along with a few other types (Table 10.2).

Table 10.2
New Jersey Local Governments, 1981

All Types	1,618
Municipalities	567
Boroughs	250
Townships	246
Cities	52
Towns	16
Villages	3
Counties	21
Authorities	210
School Districts	587
Special Districts*	233

*Counting those that actively levy and collect taxes.
Source: (8)

1. STATE AND LOCAL GOVERNMENT FINANCE

Since the distribution of services provided by each level of government differs from state to state, combined state and local general direct expenditures provide a convenient basis for making interstate comparisons. Such aggregate spending by all New Jersey governments was close to $19 billion in fiscal year 1985. Total spending figures are, however, not comparable with other states because of differences in the size (population, income, etc.) of states. Per capita expenditures and expenditures related to income provide more consistent bases for such comparison.

Per Capita Spending

Combined general expenditures per person ($2,482 in fiscal year 1985) rank sixteenth highest among all states and exceed the United States average spending of $2,313. New Jersey spending per capita is close to that of Massachusetts, substantially lower than New York's spending, but significantly higher than those for major South Atlantic states (Table 10.3).

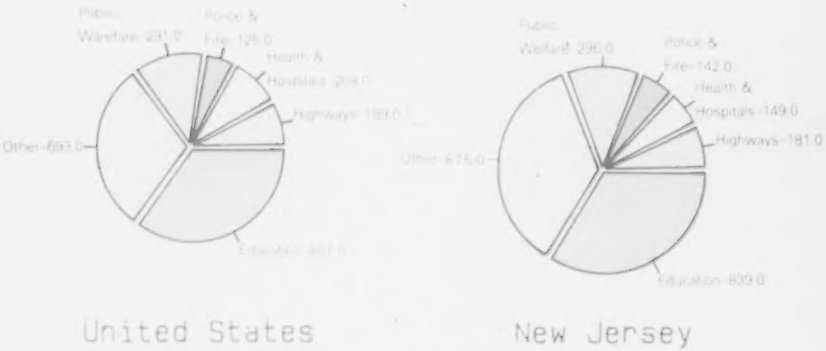
Per capita spending by state and local governments in New Jersey was about equal to the national average for highways, public welfare and financial administration. Compared to the United States average, New Jersey's spending was higher for education ($839 vs. $807) but lower for health and hospitals ($149. vs. $208) (Figure 10.3).

Table 10.3
Per Capita State and Local Government Direct General Expenditures
Selected States
Fiscal Year 1985

	Total	Education	Highways	Public Welfare	Health & Hospitals	Police & Fire	Financial Adminis.	Other
U.S.	2,313	807	189	291	208	125	44	649
N.Y.	3,343	952	183	596	338	188	49	1037
N.J.	2,482	839	181	296	149	142	45	830
PA.	2,028	704	180	328	130	143	65	478
MASS.	2,427	727	129	411	229	153	44	734
CT.	2,368	739	194	316	158	142	45	774
VA.	1,992	738	202	181	167	108	45	551
N.C.	1,785	764	150	160	178	84	28	421
GA.	1,970	680	191	173	344	91	33	458

Source: (40)

FIGURE 10.3
STATE AND LOCAL GOVERNMENT
F.Y. 1985 PER CAPITA EXPENDITURES



Source: (34)

New Jersey's state and local governments spent considerably less per capita than those of New York State in all functions. Compared to Pennsylvania, New Jersey spent substantially more in total and for education, health and hospitals, but less for public welfare. Compared to major states of New England and the South Atlantic, New Jersey spent substantially more on education and less on health and hospitals than any of those states. New Jersey spent less for welfare than Massachusetts and Connecticut, but substantially more than Virginia, North Carolina and Georgia.

Relative Tax Burden

A prevailing share of state and local spending is supported by tax revenues. (The remainder is financed by charges, earnings, and to some extent, through intergovernmental transfer.) Per capita state and local taxes provides an indicator of the tax burden that is the basis for interstate comparison. Another indicator of the tax burden, in interstate comparison, is a ratio of taxes to personal income.

State and local taxes in F.Y. 1985 were 11.4 percent of personal income in New Jersey--a slightly lower percentage than the average for all states. New Jersey's state and local taxes as a percentage of personal income were, however, substantially lower than for that New York and substantially higher than that for the South Atlantic region (Table 10.4).

Table 10.4
State and Local Taxes
Regions and States
Fiscal Year 1985

	Per Capita ($)			Percentage of Personal Income		
	Total	State	Local	Total	State	Local
United States	1,465	902	563	11.6	7.1	4.5
New England	1,626	1,017	609	11.4	7.1	4.3
New York	2,334	1,164	1,169	16.3	8.1	8.2
New Jersey	1,749	1,121	728	11.4	6.7	4.7
Pennsylvania	1,385	858	527	11.2	6.9	4.3
South Atlantic	1,261	802	459	10.5	6.7	3.8

Source: (43)

Federal Taxes

Taxes paid to the federal government overshadowed the state and local tax burden. In fiscal year 1985, the per capita federal tax burden in New Jersey was $4,008, while the respective national figure was $3,010 (Table 10.5 and Figure 10.4). On a percentage of personal income basis, New Jersey's federal tax burden was also higher than the average for all state (25.7% vs. 23.6%) and higher than those for New York, Pennsylvania and the South Atlantic region.

2. STATE FISCAL AFFAIRS

State total expenditures for a particular function includes both direct expenditures by state government and payments to local governments for that function. The principal areas of state spending are illustrated in Table 10.6. Secondary and higher education received the largest (24.6%) share

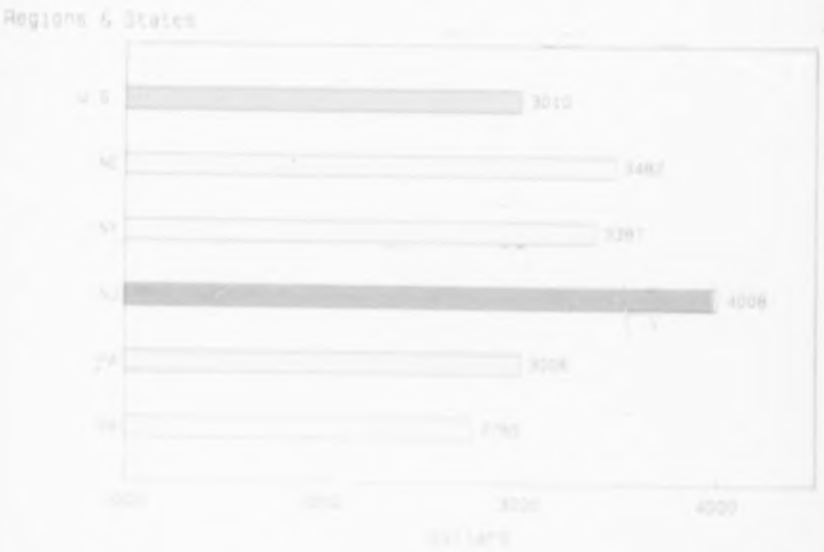
Table 10.5
Federal Tax Burden
Regions and States
Fiscal Year 1985

	Per Capita ($)	Percentage of Personal Income
United States	$3,010	23.6
New England	3,482	25.2
New York	3,387	23.4
New Jersey	4,008	25.7
Pennsylvania	3,006	24.1
South Atlantic	2,765	23.6

Source: (34)

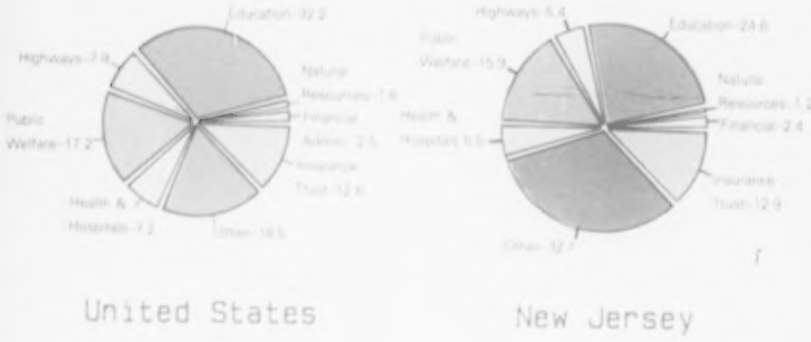
of state outlays as compared to other single functions. This is followed by public welfare payments (15.9%). New Jersey state government total per capita expenditures in 1983 were somewhat above the national average ($1,573 vs. $1,425). For the composition of expenditures at the state level (Figure 10.5).

FIGURE 10.4
FEDERAL INCOME TAXES, PER CAPITA
Fiscal Year 1985



Source: (34)

FIGURE 10.5
STATE EXPENDITURES*
NEW JERSEY AND UNITED STATES
Fiscal Year 1983



*State Expenditures include payments to other governments

Source: (34)

The sources of state government revenues for fiscal year 1985 are shown in Table 10.7. Tax revenues amounted to $7.7 billion, or about one-half of state revenues. State taxes are supplemented by non-tax revenues from own sources such as fees and payments to the insurance trust. About 17 percent of New Jersey's state revenues came from the federal government; while, nationally, states are deriving about 19 percent of their total revenues from that source.

Sales, personal income and corporation business taxes are the state's three largest tax revenue producers, yielding about $5.6 billion in FY 1986. Revenues from these and other state taxes in FY 1986 are listed in Table 10.8.

3. LOCAL FISCAL AFFAIRS

New Jersey's local government revenues in fiscal year 1985 were $11.5 billion. Only 62 percent of that total was raised through local effort, while 34 percent of that total was transfer payments from the state, and the remainder, about four percent, was grants-in-aid from the federal government.

Table 10.6
Total State Expenditures Including Payments to Other Governments by Function
New Jersey and United States
Fiscal Year 1983

	New Jersey ($ million)	Per Capita Expenditures	
		New Jersey	United States
Total	11,764.5	1,573.5	1,425.7
Education	2,895.7	387.7	459.7
Highways	642.5	86.0	112.8
Public Welfare	1,873.9	250.9	245.6
Health & Hospitals	641.3	85.9	102.1
Natural Resources	144.1	19.3	25.1
Financial Administration	276.7	37.1	36.1
Insurance Trust*	1,518.3	203.3	180.0
Liquor Stores	—	—	10.1
Other**	3,772.0	505.1	254.2

*Comprised of payments to beneficiaries of employee retirement, unemployment compensation and disability benefit social insurance programs.

**Principally police protection, correction, interest, employment security administration, utilities and intergovernmental payments to local governments not elsewhere classified.

Source: (34)

Table 10.7
State Revenue by Sources
New Jersey and United States
Fiscal Year 1985

	New Jersey Total ($ million)	Percent Distribution	
		New Jersey	United States
Total	$15,905	100.0	100.0
From Own Sources	13,111	82.4	79.5
Taxes	7,719	48.5	49.0
Fees & Miscellaneous	2,731	17.2	13.7
Insurance Trust	2,601	16.4	15.5
Liquor Stores			0.6
Utilities	269	1.7	10.7
Intergovernmental	2,794	17.6	20.5
From Federal	2,670	16.8	19.3
From Local	124	0.8	1.2

Source: (40)

Table 10.8
Major State Tax Revenues
Fiscal Year 1986

Tax	Yield ($ million)
Sales	$2,529
Personal Income	2,052
Corporation Business	996
Motor Fuels*	318
Motor Vehicle Fees	333
Cigarette	214
Transfer Inheritance and Estate	188
Insurance Premiums	125
Business Personal Property	33
Public Utility Excise	120
Alcoholic Beverage	59
Motor Fuel Use**	21
Savings Institutions	17

*Tax paid at pump.
**Tax on truckers for road use (mileage).
Source: (30)

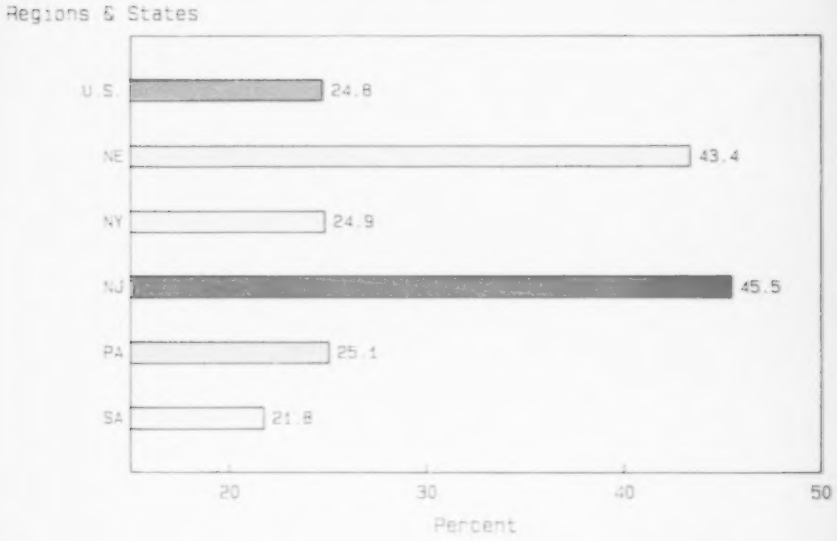
A large part of local own source revenues come from property taxes, which are almost absent in state finances. Property taxes were 45.5 percent of total local source revenue in F.Y. 1985 in New Jersey. This is much higher than the average for all states (24.8%) but close to that for the New England region (Figure 10.6).

Table 10.9
Local Government Revenues, by Source
Fiscal Year 1985
Regions and States

	Total ($ million)	Percentage Distribution		
		Own Sources	From State	From Federal
United States	$332,480	61.0	32.9	6.1
New England	15,665	62.3	29.9	7.8
New York	44,529	62.3	32.5	5.2
New Jersey	11,506	62.0	34.1	3.8
Pennsylvania	15,218	62.6	30.5	6.9
South Atlantic	49,792	61.5	31.4	7.1

Source: (34)

FIGURE 10.6
PROPERTY TAX AS A PERCENT OF LOCAL REVENUES
Fiscal Year 1985



Source: (34)

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